



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2009-25**

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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
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
<b>Biweekly 2009-24</b>			
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
<b>Biweekly 2009-25</b>			
2007-11-18 R1	R 2007-11-18	General Electric Company:	Engine: CF6-50C, CF6-50C1, CF6-50C2, and CF6-50C2R
2007-15-06 R1	R 2007-15-06	Airbus	A318-111 and -112, A319-111, -112, -113, -114, -115, -131, -132, and -133, A320-111, -211, -212, -214, -231, -232, and -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2008-06-20 R1	R 2008-06-20 R1	Fokker Services B.V	F.28 Mark 0070 and 0100 and Model F.28 Mark 1000, 2000, 3000, and 4000
2008-06-21 R1	R 2008-06-21	McDonnell Douglas Corporation	Model DC-10-10 and DC-10-10F, DC-10-15, DC-10-30 and DC-10-30F (KC-10A and KDC-10), 1 DC-10-40 and DC-10-40F, MD-10-10F and MD-10-30F, MD-11 and MD-11F
2008-09-23 R1	R 2008-09-23	Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900)
2008-09-24 R1	R 2008-09-24	Bombardier, Inc.	DHC-8-400, DHC-8-401, and DHC-8-402
2008-09-25 R1	R 2008-09-25	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
2008-11-02 R1	R 2008-11-02	Lockheed	L-1011
2008-17-01 R1	R 2008-17-01	328 Support Services GMBH	328-100
2009-21-10		AVOX Systems and B/E Aerospace	See AD
2009-24-01		Pratt & Whitney	Engine: JT8D-7, -7A, -7B, -9, -9A, -11, -15, and -17
2009-24-04		Rolls-Royce Corporation	Engine: AE 3007A1/1, AE 3007A1/3, AE 3007A1, AE 3007A1E, AE 3007A1P, AE 3007A3, AE 3007C, and AE 3007C1
2009-24-05		Rolls-Royce plc	Engine: RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17
2009-24-06	S 2008-16-01	General Electric Company	Engine: CF34-8E
2009-24-07		Boeing	737-600, -700, -700C, and -800
2009-24-08		Boeing	777-200, -200LR, -300, and -300ER
2009-24-09		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
2009-24-11		General Electric Company	Engine: CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1

## LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
2009-24-17		Boeing	747-100, 747-100B, 747-200B, 747-200C, 747-200F, and 747SR
2009-24-18		Bombardier, Inc.	CL-600-2A12 (CL-601) and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604)
2009-24-19		Airbus	A320-111, -211, -212, -214, -231, -232, and -233
2009-24-20		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700 and 701) CL-600-2D24 (Regional Jet Series 900)
2009-24-21	S 2005-19-08	McDonnell Douglas	DC-9-14, DC-9-15, and DC-9-15F ,DC-9-21 airplanes; Model DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B), DC-9-41, DC-9-51 45
2009-24-22		Learjet Inc.	DHC-8-400, DHC-8-401, and DHC-8-402
2009-25-05		Bombardier, Inc.	A300 B2-1C, A300 B2-203, A300 B2K-3C, A300 B4-103, A300 B4-203, and A300 B4-2C
2009-25-06	S 2007-18-02	Airbus	



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**2007-11-18R1 General Electric Company:** Amendment 39-16093. Docket No. FAA-2006-24171; Directorate Identifier 2006-NE-08-AD.

### **Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 4, 2010.

### **Affected ADs**

- (b) This AD revises AD 2007-11-18, Amendment 39-15075.

### **Applicability**

(c) This AD applies to General Electric Company (GE) CF6-50C, CF6-50C1, CF6-50C2, and CF6-50C2R turbofan engines, with a forward fan stator case, part number (P/N) 9064M53G04, G05, G06, G07, G08, G09, G10, G12, or G13, or P/N 9173M37G01, G02, G03, G04, G05, or G06 installed. These engines are installed on, but not limited to, Airbus A300, McDonnell Douglas DC-10 series, and DC-10-30F (KC-10A, KDC-10) airplanes.

### **Unsafe Condition**

(d) This AD revision results from a review that shows that only one of the service bulletins referenced in the original AD is applicable as a compliance method. We are issuing this AD to eliminate a certain service bulletin from the compliance method and to prevent uncontained fan blade failures, which can result in separation of airplane hydraulic lines, damage to critical airplane systems, and possible loss of airplane control.

### **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) At the next engine shop visit after the effective date of this AD, but no later than June 30, 2010, rework the forward fan stator case and install the fan module secondary containment shield.

(1) For engines on Airbus 300 series airplanes, use paragraph 3, Accomplishment Instructions, of GE Service Bulletin (SB) No. CF6-50 S/B 72-0985, Revision 3, dated August 22, 2007, to do the rework and installation.

(2) Deleted.

(g) The rework and installation specified in paragraph (f)(1) of this AD can also be done on-wing.

## **Previous Credit**

(h) Previous credit is allowed for fan stator cases reworked and containment shields installed using GE SB No. CF6-50 S/B 72-0985, dated December 2, 1991, Revision 1, dated September 15, 1998, or Revision 2, dated March 21, 2007, before the effective date of this AD. Credit is also allowed for fan stator cases reworked and containment shields installed using GE SB No. CF6-50 S/B 72-0986, dated December 2, 1991, Revision 1, dated September 15, 1998, or Revision 2, dated March 21, 2007.

## **Alternative Methods of Compliance**

(i) 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**

(j) Deleted.

(k) Contact James Rosa, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.rosa@faa.gov; telephone (781) 238-7152; fax (781) 238-7199, for more information about this AD.

(l) Contact General Electric Company, GE-Aviation, Room 285, 1 Newmann Way, Cincinnati, OH 45215, telephone (513) 552- 3272; fax (513) 552-3329; e-mail: geae.aoc@ge.com, for a copy of the service information referenced in this AD.

## **Material Incorporated by Reference**

(m) You must use GE Service Bulletin No. CF6-50 S/B 72-0985, Revision 3, dated August 22, 2007, to do the rework and installation 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 General Electric Company, GE-Aviation, Room 285, 1 Newmann Way, Cincinnati, OH 45215, telephone (513) 552- 3272; fax (513) 552-3329; e-mail: geae.aoc@ge.com, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on November 16, 2009.

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



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**2007-15-06 R1 Airbus:** Amendment 39-16097. Docket No. FAA-2009-1073; Directorate Identifier 2009-NM-174-AD.

**Effective Date**

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

**Affected ADs**

(b) This AD revises AD 2007-15-06, Amendment 39-15135.

**Applicability**

(c) This AD applies to all Airbus Model A318-111 and -112 airplanes; Model A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232 airplanes; certificated in any category.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections and critical design configuration control limitations (CDCCLs). Compliance with the operator maintenance documents 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 and CDCCLs, the operator may not be able to accomplish inspections and CDCCLs 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 (i) of this AD. The request should include a description of changes to the required inspections and CDCCLs that will preserve the critical ignition source prevention feature of the affected fuel system.

**Unsafe Condition**

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

**Compliance**

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

## **Restatement of AD 2007-15-06, With Revised Service Information**

### **Revise Airworthiness Limitations Section (ALS) To Incorporate Fuel Maintenance and Inspection Tasks**

(f) Within 3 months after August 28, 2007 (the effective date of AD 2007-15-06), revise the ALS of the Instructions for Continued Airworthiness to incorporate Airbus A318/A319/A320/A321 ALS Part 5–Fuel Airworthiness Limitations, dated February 28, 2006, as defined in Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 1, dated December 19, 2005 (approved by the European Aviation Safety Agency (EASA) on March 14, 2006), Section 1, "Maintenance/Inspection Tasks;" or Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 2, dated July 8, 2008 (approved by the EASA on December 19, 2008), Section 1, "Maintenance/Inspection Tasks." For all tasks identified in Section 1 of Document 95A.1931/05, the initial compliance times start from August 28, 2007, and the repetitive inspections must be accomplished thereafter at the intervals specified in Section 1 of Document 95A.1931/05.

Note 2: Airbus Operator Information Telex (OIT) SE 999.0076/06, dated June 20, 2006, identifies the applicable sections of the Airbus A318/A319/A320/A321 Airplane Maintenance Manual necessary for accomplishing the tasks specified in Section 1 of Document 95A.1931/05.

### **Revise ALS To Incorporate CDCCLs**

(g) Within 12 months after August 28, 2007, revise the ALS of the Instructions for Continued Airworthiness to incorporate Airbus A318/A319/A320/A321 ALS Part 5–Fuel Airworthiness Limitations, dated February 28, 2006, as defined in Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 1, dated December 19, 2005 (approved by the EASA on March 14, 2006), Section 2, "Critical Design Configuration Control Limitations;" or Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 2, dated July 8, 2008 (approved by EASA on December 19, 2008), Section 2, "Critical Design Configuration Control Limitations."

### **No Alternative Inspections, Inspection Intervals, or CDCCLs**

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

### **New Information**

#### **Explanation of CDCCL Requirements**

Note 3: Notwithstanding any other maintenance or operational requirements, components that have been identified as airworthy or installed on the affected airplanes before the revision of the ALS, as required by paragraphs (f) and (g) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the ALS has been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

## Other FAA AD Provisions

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

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

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

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

## Related Information

(j) EASA Airworthiness Directive 2006-0203, dated July 11, 2006, also addresses the subject of this AD.

## Material Incorporated by Reference

(k) You must use Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 1, dated December 19, 2005; Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 2, dated July 8, 2008; and Airbus A319/A319/A320/A321 ALS Part 5–Fuel Airworthiness Limitations, dated February 28, 2006; 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 Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 2, dated July 8, 2008, 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 Airbus A318/A319/A320/A321 Fuel Airworthiness Limitations, Document 95A.1931/05, Issue 1, dated December 19, 2005; and Airbus A319/A319/A320/A321 ALS Part 5–Fuel Airworthiness Limitations, dated February 28, 2006; on August 28, 2007 (72 FR 40222, July 24, 2007).

(3) 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>.

(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 November 16, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2008-06-20 R1 Fokker Services B.V.:** Amendment 39-16089. Docket No. FAA-2009-1070; Directorate Identifier 2009-NM-180-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 8, 2009.

**Affected ADs**

- (b) This AD revises AD 2008-06-20, Amendment 39-15432.

**Applicability**

(c) This AD applies to Fokker Model F.28 Mark 0070 and 0100 airplanes, all serial numbers, certificated in any category; and Model F.28 Mark 1000, 2000, 3000, and 4000 airplanes, serial numbers 11003 through 11241 inclusive, and 11991 and 11992, 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) 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 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](http://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 includes revising the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness for certain airplanes, and the FAA-approved maintenance program for certain other airplanes, to incorporate new limitations for fuel tank systems.

## **Restatement of Requirements of AD 2008-06-20, With Change to Compliance Method**

### **Actions and Compliance**

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

(1) Within 3 months after April 23, 2008 (the effective date of AD 2008-06-20), do the action in paragraph (f)(1)(i) or (f)(1)(ii) of this AD, as applicable. For all identified tasks, the initial compliance time starts from April 23, 2008. The repetitive inspections must be accomplished thereafter at the intervals not to exceed those specified in Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006; or Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008; as applicable; except as provided by paragraphs (f)(3), (f)(4), and (g)(1) of this AD.

(i) For Model F.28 Mark 0070 and 0100 airplanes: Revise the ALS of the Instructions for Continued Airworthiness to incorporate the inspections, thresholds, and intervals specified in Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006.

(ii) For Model F.28 Mark 1000, 2000, 3000, and 4000 airplanes: Incorporate into the FAA-approved maintenance inspection program the inspections, thresholds, and intervals specified in Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008.

(2) Within 3 months after April 23, 2008, do the action in paragraph (f)(2)(i) or (f)(2)(ii) of this AD, as applicable.

(i) For Model F.28 Mark 0070 and 0100 airplanes: Revise the ALS of the Instructions for Continued Airworthiness to incorporate the CDCCLs as defined in Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006, except for the CDCCL component titled "Level Control Pilot Valve Solenoid, jiffy junction."

(ii) For Model F.28 Mark 1000, 2000, 3000, and 4000 airplanes: Incorporate into the FAA-approved maintenance inspection program the CDCCLs as defined in Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008.

(3) Where Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006; and Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008; allow 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.

(4) After accomplishing the actions specified in paragraphs (f)(1) and (f)(2) of this AD, no alternative inspection, inspection interval, or CDCCL may be used, unless the inspection, interval, or CDCCL is approved as an alternative method of compliance (AMOC) in accordance with the procedures specified in paragraph (g)(1) of this AD.

(5) Actions done before the effective date of this AD in accordance with Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 1, dated January 31, 2006; or Fokker Service Bulletin F28/28-050, dated June 30, 2006; are acceptable for compliance with the corresponding requirements of this AD.

Note 2: For Model F.28 Mark 1000, 2000, 3000, and 4000 airplanes, after an operator complies with the requirements of paragraphs (f)(1)(ii) and (f)(2)(ii) of this AD, those paragraphs do not require that operators subsequently record accomplishment of those requirements each time an applicable action is accomplished according to that operator's FAA-approved maintenance inspection program.

## **New Information**

### **Explanation of CDCCL Requirements**

Note 3: Notwithstanding any other maintenance or operational requirements, components that have been identified as airworthy or installed on the affected airplanes before the revision of the ALS for certain airplanes, and the FAA-approved maintenance program for certain other airplanes, as required by paragraph (f) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the ALS for certain airplanes, and the FAA-approved maintenance program for certain other airplanes has been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

## **FAA AD Differences**

Note 4: 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: Tom Rodriguez, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1137; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) Airworthy Product: For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to ensure 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 (EASA) Airworthiness Directive 2006-0206, dated June 11, 2006; EASA Airworthiness Directive 2006-0208, dated July 12, 2006; Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006; and Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008; for related information.

## **Material Incorporated by Reference**

(i) You must use Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006; and Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008; as applicable; 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 Fokker 70/100 Fuel Airworthiness Limitation Items (ALI) and Critical Design Configuration Control Limitations (CDCCL) Report SE-672, Issue 2, dated December 1, 2006; and Fokker Service Bulletin SBF28-28-050, Revision 1, dated January 8, 2008; on April 23, 2008 (73 FR 14661, March 19, 2008).

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

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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 November 6, 2009.

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



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**2008-06-21 R1 McDonnell Douglas Corporation:** Amendment 39-16100. Docket No. FAA-2009-1071; Directorate Identifier 2009-NM-160-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective December 10, 2009.

**Affected ADs**

(b) This AD revises AD 2008-06-21, Amendment 39-15433.

**Applicability**

(c) This AD applies to all McDonnell Douglas Corporation Model DC-10-10 and DC-10-10F airplanes, Model DC-10-15 airplanes, Model DC-10-30 and DC-10-30F (KC-10A and KDC-10) airplanes, Model DC-10-40 and DC-10-40F airplanes, Model MD-10-10F and MD-10-30F airplanes, and Model MD-11 and MD-11F airplanes; 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 (AMOC) in accordance with paragraph (l) 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.

**Unsafe Condition**

(d) This AD results from a design review of the fuel tank systems. We are issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

**Compliance**

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

## **Service Information Reference**

(f) The term "Report MDC-02K1003" as used in this AD, means the Boeing Trijet Special Compliance Item Report, MDC-02K1003, Revision C, dated July 24, 2007.

## **Restatement of Requirements of AD 2008-06-21, With Changes to Compliance Method**

### **Revise the FAA-Approved Maintenance Program**

(g) For Model DC-10-10 and DC-10-10F airplanes, Model DC-10-15 airplanes, Model DC-10-30 and DC-10-30F (KC-10A and KDC-10) airplanes, and Model DC-10-40 and DC-10-40F airplanes: Before December 16, 2008, revise the FAA-approved maintenance program to incorporate the information specified in Appendixes B, C, and D of Report MDC-02K1003.

### **Revise the Airworthiness Limitations (AWLs) Section**

(h) For Model MD-10-10F and MD-10-30F airplanes, and Model MD-11 and MD-11F airplanes: Before December 16, 2008, revise the AWLs section of the Instructions for Continued Airworthiness to incorporate the information specified in Appendixes B, C, and D of Report MDC-02K1003, except that the initial inspection required by paragraph (i) of this AD must be done at the applicable compliance time specified in that paragraph.

### **Initial Inspection and Repair if Necessary**

(i) For Model MD-11 and MD-11F airplanes: Within 60 months after April 23, 2008 (the effective date AD 2008-06-21), do a detailed inspection of the metallic overbraiding and red-wrap tape installed on the tail tank fuel quantity indication system (FQIS) wiring to verify if the metallic overbraiding or red-wrap tape is damaged or shows signs of deterioration, in accordance with ALI 20-2 of Appendix C of Report MDC-02K1003. If any discrepancy is found during the inspection, repair the discrepancy before further flight in accordance with ALI 20-2 of Appendix C of Report MDC-02K1003.

Note 2 : For the purposes of this AD, a detailed inspection is: "An intensive examination of a specific item, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at an intensity deemed appropriate. Inspection aids such as mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

### **No Reporting Requirement**

(j) Although Report MDC-02K1003 specifies to submit certain information to the manufacturer, this AD does not require that action.

## **No Alternative Inspections, Inspection Intervals, or Critical Design Configuration Control Limitations (CDCCLs)**

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

### **New Information**

#### **Explanation of CDCCL Requirements**

Note 3: 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 FAA-approved maintenance program, or the AWLs section, as required by paragraphs (g) and (h) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the FAA-approved maintenance program, or the AWLs section, as applicable, has been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

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

(1)(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Philip C. Kush, Aerospace Engineer, Propulsion Branch, ANM-140L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5263; fax (562) 627-5210.

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

(3) AMOCs approved previously in accordance with AD 2008-06-21, Amendment 39-15433, are approved as AMOCs for the corresponding provisions of this AD.

#### **Material Incorporated by Reference**

(m) You must use Boeing Trijet Special Compliance Item Report, MDC-02K1003, Revision C, dated July 24, 2007, 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 Boeing Trijet Special Compliance Item Report, MDC-02K1003, Revision C, dated July 24, 2007, on April 23, 2008 (73 FR 14673, March 19, 2008).

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

(3) You may review copies of the service information at the FAA, 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 November 12, 2009.

Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2008-09-23 R1 Bombardier, Inc. (Formerly Bombardier Aerospace, Inc.; Canadair):**  
Amendment 39-16107. Docket No. FAA-2009-1075; Directorate Identifier 2009-NM-181-AD.

**Effective Date**

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

**Affected ADs**

- (b) This AD revises AD 2008-09-23, Amendment 39-15504.

**Applicability**

(c) This AD applies to all Bombardier Inc. Model CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705), and CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category, all serial numbers.

**Subject**

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

**Reason**

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

Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002-043. The identified non-compliances were then assessed using Transport Canada Policy Letter No. 525-001, to determine if mandatory corrective action is required.

The assessment showed that it is necessary to introduce Critical Design Configuration Control Limitations (CDCCL), in order to preserve critical fuel tank system ignition source prevention features during configuration changes such as modifications and repairs, or during maintenance actions. Failure to preserve critical fuel tank system ignition source prevention features could result in a fuel tank explosion. Revision has been made to Bombardier CL-600-2C10, CL-600-2D15, CL-600-2D24 Maintenance Requirements Manual, CSP B-053, Part 2, Section 3, "Fuel System Limitations" to introduce the required CDCCL.

The corrective action is revising the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness to include the CDCCL data.

### **Restatement of AD 2008-09-23, With Changes to Compliance Method: Actions and Compliance**

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

(1) Within 60 days after June 6, 2008 (the effective date of AD 2008-09-23), revise the ALS of the Instructions for Continued Airworthiness to incorporate the CDCCL data specified in CRJ 700/900 Series Regional Jet (Bombardier) Temporary Revision (TR) 2-222, dated March 30, 2006, to Section 3, "Fuel System Limitations," of Part 2 of Bombardier CL-600-2C10, CL-600-2D15 and CL-600-2D24 Maintenance Requirements Manual CSP B-053.

Note 1: The actions required by paragraph (f)(1) of this AD may be done by inserting a copy of the TR into the maintenance requirements manual. When the TR has been included in the general revision of the maintenance program, the general revision may be inserted into the maintenance requirements manual, provided the relevant information in the general revision is identical to that in the TR, and the temporary revision may be removed.

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

### **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 ALS of the Instructions for Continued Airworthiness, as required by paragraph (f) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the ALS of the Instructions for Continued Airworthiness 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, New York ACO, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York, 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as

appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to ensure 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. 3502 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 Canadian Airworthiness Directive CF-2008-07, dated January 25, 2008; and CRJ 700/900 Series Regional Jet (Bombardier) Temporary Revision 2-222, dated March 30, 2006; for related information.

### **Material Incorporated by Reference**

(i) You must use CRJ 700/900 Series Regional Jet (Bombardier) Temporary Revision 2-222, dated March 30, 2006, to Section 3, "Fuel System Limitations," of Part 2 of Bombardier CL-600-2C10, CL-600-2D15 and CL-600-2D24 Maintenance Requirements Manual CSP B-053, 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 CRJ 700/900 Series Regional Jet (Bombardier) Temporary Revision 2-222, dated March 30, 2006, to Section 3, "Fuel System Limitations," of Part 2 of Bombardier CL-600-2C10, CL-600-2D15, and CL-600-2D24 Maintenance Requirements Manual CSP B-053, on June 6, 2008 (73 FR 24145, May 2, 2008).

(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 November 18, 2009.

Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2008-09-24 R1 BOMBARDIER, INC. (Formerly de Havilland, Inc.):** Amendment 39-16122.  
Docket No. FAA-2009-1106; Directorate Identifier 2009-NM-171-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 21, 2009.

**Affected ADs**

- (b) This AD revises AD 2008-09-24, Amendment 39-15505.

**Applicability**

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

**Subject**

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

**Reason**

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

"Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002-043. The identified non-compliances were then assessed using Transport Canada Policy Letter No. 525-001, to determine if mandatory corrective action is required."

"The assessment showed that it is necessary to introduce Critical Design Configuration Control Limitations (CDCCL), in order to preserve critical fuel tank system ignition source prevention features during configuration changes such as modifications and repairs, or during maintenance actions. Failure to preserve critical fuel tank system ignition source prevention features could result in a fuel tank explosion. Revisions have been made to Part 2 "Airworthiness Limitations Items" of the Maintenance Requirements Manual of the affected models to introduce the required CDCCL."

The corrective action is revising the Airworthiness Limitations Section (ALS) of the Instructions for Continued Airworthiness to include the CDCCL data.

## **Restatement of Requirements of AD 2008-09-24, With Updated Service Information**

### **Actions and Compliance**

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

(1) For all airplanes: Within 60 days after June 6, 2008 (the effective date of AD 2008-09-24), revise the ALS of the Instructions for Continued Airworthiness to incorporate the CDCCLs specified in Dash 8 Q400 (Bombardier) Temporary Revisions (TRs) ALI-55, dated April 19, 2006; ALI-56, dated April 19, 2006; and TR ALI-76, dated January 24, 2008; to Part 2, "Airworthiness Limitations Items," of the Bombardier Dash 8 Q400 Maintenance Requirements Manual (MRM) PSM 1-84-7.

Note 1: The actions required by paragraph (f)(1) of this AD may be done by inserting a copy of the applicable TRs into the maintenance requirements manual. When the TRs have been included in the general revision of the maintenance program, the general revision may be inserted into the maintenance requirements manual, provided the relevant information in the general revision is identical to that in the applicable TRs, and the TRs may be removed.

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

### **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 ALS, as required by paragraph (f)(1) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the ALS 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, New York Aircraft Certification Office, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York, 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(2) **Airworthy Product:** For any requirement in this AD to obtain corrective actions from a manufacturer or other source, use these actions if they are FAA-approved. Corrective actions are considered FAA-approved if they are approved by the State of Design Authority (or their delegated agent). You are required to ensure 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 Canadian Airworthiness Directive CF-2008-06, dated January 15, 2008, and the service information specified in Table 1 of this AD, for related information.

**Table 1 – Related Service Information**

<b>Dash 8 Q400 (Bombardier) TR –</b>	<b>Dated –</b>
ALI-55	April 19, 2006
ALI-56	April 19, 2006
ALI-76	January 24, 2008

### Material Incorporated by Reference

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

**Table 2 – Service Information Incorporated by Reference**

<b>Dash 8 Q400 (Bombardier) TR –</b>	<b>Dated –</b>
ALI-55 to Part 2, “Airworthiness Limitations Items,” of the Bombardier Dash 8 Q400 Maintenance Requirements Manual (MRM) PSM 1-84-7	April 19, 2006
ALI-56 to Part 2, “Airworthiness Limitations Items,” of the Bombardier Dash 8 Q400 Maintenance Requirements Manual (MRM) PSM 1-84-7	April 19, 2006
ALI-76 to Part 2, “Airworthiness Limitations Items,” of the Bombardier Dash 8 Q400 Maintenance Requirements Manual (MRM) PSM 1-84-7	January 24, 2008

(1) The Director of the Federal Register approved the incorporation by reference of Dash 8 Q400 (Bombardier) TR ALI-76, dated January 24, 2008, 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 Dash 8 Q400 (Bombardier) TR ALI-55, dated April 19, 2006; and Dash 8 Q400 (Bombardier) TR ALI-56, dated April 19, 2006; on June 6, 2008 (73 FR 24143, May 2, 2008).

(3) 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.qseries@aero.bombardier.com](mailto:thd.qseries@aero.bombardier.com); Internet <http://www.bombardier.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 November 19, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2008-09-25 R1 Bombardier, Inc. (Formerly de Havilland, Inc.):** Amendment 39-16099. Docket No. FAA-2009-1072; Directorate Identifier 2009-NM-169-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective December 10, 2009.

**Affected ADs**

- (b) This AD revises AD 2008-09-25, Amendment 39-15506.

**Applicability**

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

**Subject**

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

**Reason**

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

Bombardier Aerospace has completed a system safety review of the aircraft fuel system against fuel tank safety standards introduced in Chapter 525 of the Airworthiness Manual through Notice of Proposed Amendment (NPA) 2002-043. The identified non-compliances were then assessed using Transport Canada Policy Letter No. 525-001, to determine if mandatory corrective action is required.

The assessment showed that it is necessary to introduce Critical Design Configuration Control Limitations (CDCCL), in order to preserve critical fuel tank system ignition source prevention features during configuration changes such as modifications and repairs, or during maintenance actions. Failure to preserve critical fuel tank system ignition source prevention features could result in a fuel tank explosion. Revisions have been made to Part 2 "Airworthiness Limitations List" of the Maintenance Program Manuals of the affected aircraft models to introduce the required CDCCL. The corrective action is revising the Airworthiness Limitations section of the Instructions for Continued Airworthiness to include the CDCCL data.

## Restatement of AD 2008-09-25, With Revised Compliance Method

### Actions and Compliance

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

(1) For all airplanes: Within 60 days after June 6, 2008 (the effective date of AD 2008-09-25), revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness to incorporate the CDCCL data specified in the applicable temporary revision (TR) to the applicable maintenance program manual (MPM). The TRs are listed in Table 1 of this AD.

**Table 1 – Temporary Revisions**

<b>Model</b>	<b>de Havilland TR</b>	<b>Maintenance Program Manual</b>
DHC-8-102, DHC-8-103, and DHC-8-106 airplanes	AWL-98, dated April 12, 2006	Part 2, “Airworthiness Limitations List,” of de Havilland Dash 8 Series 100 MPM, Product Support Manual (PSM) 1-8-7
DHC-8-201, and DHC-8-202 airplanes	AWL 2-35, dated April 12, 2006	Part 2, “Airworthiness Limitations List,” of de Havilland Dash 8 Series 200 MPM, PSM 1-82-7
DHC-8-301, DHC-8-311, and DHC-8-315 airplanes	AWL 3-103, dated April 12, 2006	Part 2, “Airworthiness Limitations List,” of de Havilland Dash 8 Series 300 MPM, PSM 1-83-7

Note 1: The revisions required by paragraph (f)(1) of this AD may be done by inserting a copy of the applicable TR into the applicable maintenance program manual. When the TR has been included in the general revision of the maintenance program, the general revision may be inserted into the maintenance program manual, provided the relevant information in the general revision is identical to that in the applicable TR, and the temporary revision may be removed.

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

### 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 ALS, as required by paragraph (f)(1) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the ALS 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, New York Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Mazdak Hobbi, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7330; fax (516) 794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

## Related Information

(h) Refer to MCAI Canadian Airworthiness Directive CF-2008-03, dated January 3, 2008, and the TRs specified in Table 1 of this AD, for related information.

## Material Incorporated by Reference

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

**Table 2 – Material Incorporated by Reference**

<b>de Havilland Temporary Revision –</b>	<b>Dated –</b>	<b>To –</b>
AWL-98	April 12, 2006	Part 2, “Airworthiness Limitations List,” of de Havilland Dash 8 Series 100 Maintenance Program Manual, Product Support Manual 1-8-7
AWL 2-35	April 12, 2006	Part 2, “Airworthiness Limitations List,” of de Havilland Dash 8 Series 200 Maintenance Program Manual, Product Support Manual 1-82-7
AWL 3-103	April 12, 2006	Part 2, “Airworthiness Limitations List,” of de Havilland Dash 8 Series 300 Maintenance Program Manual, Product Support Manual 1-83-7

(1) The Director of the Federal Register previously approved the incorporation by reference of this service information on June 6, 2008 (73 FR 24157, May 2, 2008).

(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.qseries@aero.bombardier.com](mailto:thd.qseries@aero.bombardier.com); Internet <http://www.bombardier.com>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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 November 16, 2009.

Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2008-11-02 R1 Lockheed:** Amendment 39-16078. Docket No. FAA-2009-1022; Directorate Identifier 2009-NM-163-AD.

**Effective Date**

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

**Affected ADs**

- (b) This AD revises AD 2008-11-02, Amendment 39-15524.

**Applicability**

- (c) This AD applies to all Lockheed Model L-1011 series airplanes, 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 (AMOC) in accordance with paragraph (k) 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.

**Unsafe Condition**

(d) This AD results from a design review of the fuel tank systems. We are issuing this AD to prevent the potential for ignition sources inside fuel tanks caused by latent failures, alterations, repairs, or maintenance actions, which, in combination with flammable fuel vapors, could result in a fuel tank explosion and consequent loss of the airplane.

**Compliance**

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

## **Restatement of Requirements of AD 2008-11-02 With Changes to Compliance Method**

### **Service Bulletin Reference**

(f) The term "service bulletin," as used in this AD, means the Accomplishment Instructions of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008.

### **Maintenance Program Revision**

(g) Before December 16, 2008, revise the FAA-approved maintenance program to incorporate the fuel system limitations (FSLs) specified in paragraphs 2.B.(1)(b), 2.B.(1)(e), 2.B.(1)(f), and 2.B.(1)(g) of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, and the critical design configuration control limitations (CDCCLs) specified in paragraph 2.C. of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008; except as provided by paragraphs (g)(1), (g)(2), and (h) of this AD.

(1) Where the FSLs specify to inspect, this AD would require doing a general visual inspection.

Note 2: For the purposes of this AD, a general visual inspection is: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(2) For the CDCCLs specified in paragraphs 2.C.(2)(c), 2.C.(2)(d), and 2.C.(15)(a) of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, do the applicable actions using a method approved in accordance with a method approved by the Manager, Atlanta Aircraft Certification Office, FAA.

Note 3: Guidance on certain CDCCLs can be found in the documents identified in Table 1 of this AD.

**Table 1 – Approved Methods for Certain CDCCLs**

<b>For the CDCCL identified in Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, in paragraph -</b>	<b>Guidance can be found in -</b>	<b>For -</b>
2.C.(2)(c)	Hamilton Sundstrand Overhaul Manual 28-24-03, Revision 14, dated May 15, 2000	Overhauling and repairing the electrically-operated fuel boost pumps.
2.C.(2)(d)	Lockheed L-1011 Service Information Letter 28-12, dated March 17, 1998	Keeping the electrical conduit for the electrically-operated fuel boost pumps open and unplugged at the wing rear spar.
2.C.(15)(a)	Lockheed Drawing 1527514, Revision D, dated September 26, 1981	Installing the fuel tank valves, auxiliary power unit pump, sight gauges, fuel quantity indicating system tank units, over-wing filler cap adapter ring, boost pump mounting plate, and access doors for the boost pump, vent box, vent valve, and fuel level control switch.

### **Initial Accomplishment of FSLs and Repair if Necessary**

(h) At the applicable compliance time specified in paragraph (h)(1) or (h)(2) of this AD, do the applicable FSLs specified in paragraphs 2.B.(1)(b), 2.B.(1)(e), 2.B.(1)(f), and 2.B.(1)(g) of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, and repair any discrepancy, in accordance with Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008. Any repair must be done before further flight.

(1) For the FSL identified in paragraph 2.B.(1)(b) of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, do the FSL before December 16, 2008.

(2) For the FSLs identified in paragraphs 2.B.(1)(e), 2.B.(1)(f), and 2.B.(1)(g) of Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, do the applicable FSLs within 60 months after June 25, 2008 (the effective date AD 2008-11-02).

Note 4: Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, refers to the service information listed in Table 2 of this AD as additional sources of guidance for doing the FSLs and repair.

**Table 2 – Additional Sources of Guidance for Certain FSLs**

<b>The FSL identified in Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, in paragraph -</b>	<b>Refers to Lockheed Service Bulletin -</b>	<b>For -</b>
2.B.(1)(b)	093-28-089, Revision 3, dated October 4, 2006	Removing auxiliary fuel tank No. 4, if applicable.
2.B.(1)(e)	093-28-095, dated September 13, 2006	Inspecting the airplane fuel tanks and vent boxes for cleanliness and evidence of deteriorated or damaged fuel/vent tubes and components; inspecting bonding jumpers for proper installation, corrosion, frayed or broken strands, and the condition of the environmental sealing or bonding clamps and hardware; correcting any discrepant conditions; adding bonding jumpers to the fuel/vent tube fittings; and inspecting the bonding jumpers on the fuel/vent tube fittings.
2.B.(1)(f)	093-28-096, Revision 2, dated June 23, 2006	Inspecting the wiring harnesses of the No. 1 and No. 3 engine tank valves for evidence of damage and fuel contamination; replacing any damaged wire with new wire; and repairing or replacing any contaminated wires as applicable.
2.B.(1)(g)	093-28-097, dated August 3, 2006	Identifying the wiring harnesses for the fuel quantity indicator system (FQIS); inspecting the FQIS wiring harnesses for any visible damage, wear, chafing, or indications of electrical arcing; and replacing or repairing any damaged wires as applicable.

### **No Reporting Requirement**

(i) Although Lockheed Service Bulletin 093-28-095, dated September 13, 2006; Lockheed Service Bulletin 093-28-096, Revision 2, dated June 23, 2006; and Lockheed Service Bulletin 093-28-097, dated August 3, 2006; specify to notify Lockheed of any discrepancies found during inspection or any evidence of damage or wire replacement, this AD does not require that action.

## **No Alternative Inspections, Inspection Intervals, or CDCCLs**

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

## **New Information**

### **Explanation of CDCCL Requirements**

Note 5: 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 FAA-approved maintenance program, as required by paragraph (g) of this AD, do not need to be reworked in accordance with the CDCCLs. However, once the FAA-approved maintenance program has been revised, future maintenance actions on these components must be done in accordance with the CDCCLs.

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

(k)(1) The Manager, Atlanta Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Robert Bosak, Aerospace Engineer, Propulsion Branch, ACE-118A, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; telephone (404) 474-5583; fax (404) 474-5606.

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

### **Material Incorporated by Reference**

(1) You must use Lockheed Service Bulletin 093-28-098, Revision 1, dated January 22, 2008, 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 June 25, 2008 (73 FR 29410 May 21, 2008).

(2) For service information identified in this AD, contact Lockheed Continued Airworthiness Project Office, Attention Airworthiness, 86 South Cobb Drive, Marietta, Georgia 30063-0567; telephone 770-494-5444; fax 770-494-5445; e-mail [ams.portal@lmco.com](mailto:ams.portal@lmco.com); Internet <http://www.lockheedmartin.com/ams/tools/TechPubs.html>.

(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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**2008-17-01 R1 328 Support Services GMBH (Formerly, AvCraft Aerospace GmbH, formerly Fairchild Dornier GmbH, formerly Dornier Luftfahrt GmbH):** Amendment 39-16106. Docket No. FAA-2009-1074; Directorate Identifier 2009-NM-177-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective December 21, 2009.

**Affected ADs**

(b) This AD revises AD 2008-17-01, Amendment 39-15639.

**Applicability**

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

**Unsafe Condition**

(d) This AD results from fuel system reviews conducted by the manufacturer. We are issuing this AD to reduce the potential of ignition sources inside fuel tanks, which, in combination with flammable fuel vapors, could result in fuel tank explosions and consequent loss of the airplane.

**Compliance**

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

Note 1: This AD requires revisions to certain operator maintenance documents to include 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 (j) 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.

## Restatement of Requirements of AD 2005-13-24, With No Changes

### Modification and Installations

(f) Within 12 months after July 29, 2005 (the effective date of AD 2005-13-24), do the actions in Table 1 of this AD in accordance with the Accomplishment Instructions of AvCraft Service Bulletin SB-328-00-445, dated August 23, 2004; or Revision 1, dated June 17, 2005.

**Table 1 – Requirements**

<b>Do the following actions—</b>	<b>By accomplishing all the actions specified in—</b>
(1) Modify the electrical wiring of the left-hand and right-hand fuel pumps	Paragraph 2.B(1) of AvCraft Service Bulletin SB-328-00-445, dated August 23, 2004; or Revision 1, dated June 17, 2005.
(2) Install insulation at the left-hand and right-hand flow control and shut-off valves, and other components of the environmental control system.	Paragraph 2.B(2) of AvCraft Service Bulletin SB-328-00-445, dated August 23, 2004; or Revision 1, dated June 17, 2005.
(3) Install markings at fuel wiring harnesses	Paragraph 2.B(3) of AvCraft Service Bulletin SB-328-00-445, dated August 23, 2004; or Revision 1, dated June 17, 2005.

### Revision to Airworthiness Limitations

(g) Within 12 months after July 29, 2005, revise the Airworthiness Limitations section (ALS) of the Instructions for Continued Airworthiness by inserting a copy of Dornier Temporary Revision ALD-080, dated October 15, 2003, into the Dornier 328 Airworthiness Limitations Document. Thereafter, except as provided in paragraphs (i) and (j) of this AD, no alternative inspection intervals may be approved for this fuel tank system.

## Restatement of Requirements of AD 2008-17-01, With No Changes

### Revised Initial Compliance Time

(h) For Tasks 28-00-00-02 and 28-00-00-03 ("Detailed Inspection of Outer Fuel Tank Harness Internal, LH/RH," and "Detailed Inspection of Inner Fuel Tank Harness Internal, LH/RH"), as identified in Dornier Temporary Revision ALD-080, dated October 15, 2003, or Section F, "Fuel Tank System Limitations," of the Dornier 328 Airworthiness Limitations Document (ALD), Revision 15, dated January 15, 2005; the initial compliance time is within 8 years after September 17, 2008 (the effective date of AD 2008-17-01). Thereafter, except as provided by paragraphs (i) and (j) of this AD, these tasks must be accomplished at the repetitive interval specified in Section F, "Fuel Tank System Limitations," of the Dornier 328 ALD, Revision 15, dated January 15, 2005.

## **No Alternative Inspections, Inspection Intervals, or Critical Design Configuration Control Limitations (CDCCLs)**

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

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

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

(j) 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: 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) 425-1149. 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.

### **Related Information**

(k) European Aviation Safety Agency Airworthiness Directive 2006-0197 [Corrected], dated July 11, 2006, also addresses the subject of this AD.

### **Material Incorporated by Reference**

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

**Table 2 – Material Incorporated by Reference**

<b>Service Information</b>	<b>Revision Level</b>	<b>Date</b>
AvCraft Service Bulletin SB-328-00-445, including Price Information Sheet	Original	August 23, 2004
AvCraft Service Bulletin SB-328-00-445	1	June 17, 2005
Dornier Temporary Revision ALD-080	Original	October 15, 2003
Section F, "Fuel Tank System Limitations," of Dornier 328 Airworthiness Limitations Document	15	January 15, 2005

(1) The Director of the Federal Register previously approved the incorporation by reference of AvCraft Service Bulletin SB-328-00-445, Revision 1, dated June 17, 2005; and Section F, "Fuel Tank System Limitations," of Dornier 328 Airworthiness Limitations Document, Revision 15, dated January 15, 2005 on September 17, 2008 (73 FR 47027, August 13, 2008).

(2) The Director of the Federal Register previously approved the incorporation by reference of AvCraft Service Bulletin SB-328-00-445, including Price Information Sheet, dated August 23, 2004; and Dornier Temporary Revision ALD-080, dated October 15, 2003; on July 29, 2005 (70 FR 36470, June 24, 2005).

(3) For service information identified in this AD, contact 328 Support Services GmbH, 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](mailto:gsc.op@328support.de); Internet <http://www.328support.de>.

(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 November 18, 2009.

Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-21-10 AVOX Systems and B/E Aerospace:** Amendment 39-16049. Docket No. FAA-2009-0915; Directorate Identifier 2009-NM-224-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to the oxygen cylinder assemblies, approved under United States Department of Transportation Regulations for Type 3HT cylinders, identified in Table 1 of this AD. These oxygen cylinder assemblies may be installed on various transport airplanes, certificated in any category, identified in but not limited to the airplanes included in Table 2 of this AD.

**Table 1—Affected Oxygen Cylinder Assembly Part Numbers**

<b>Manufacturer</b>	<b>Part Nos.</b>
AVOX Systems	*6350A34 series, 800112-03, 800112-10, 800112-13, 801293-03, 801307-00, 801307-01, 801307-02, 801307-03, 801307-07, 801307-09, 801307-23, 801307-24, 801365-04, 801365-14, 801375-00, 801977-05, *8915 series.  (*For example, 6350A34-X-X or 8915XX-XX, where “X” denotes a part number digit).
B/E Aerospace	B43570-3, B43570-5, 176018-115, 176112-115, 176177-115, 176181-115, 176529-97.

**Table 2 – Affected Airplanes**

<b>Manufacturer</b>	<b>Model</b>
Airbus	A300 B4-620, B4-622, B4-605R, and F4-605R airplanes
	A310-203, -204, -221, -222, -304, and -324 airplanes
	A318-111 and -112 airplanes
	A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes
	A320-111, -211, -212, -214, -231, -232, and -233 airplanes
	A321-111, -112, -131, -211, and -231 airplanes
	A330-301, -321, and -322 airplanes
	A340-211 and -212 airplanes
	A340-311 and -312 airplanes
The Boeing Company	707-100 long body, -200, -100B long body, and -100B short body series airplanes; and 707-300, -300B, -300C, and -400 series airplanes
	727, 727C, 727-100, 727 -100C, 727-200, and 727-200F series airplanes
	737-100, -200, -200C, -300, -400, -500, -600, -700, -700C, -800, -900, and -900ER series airplanes
	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes
	757-200, -200PF, -200CB, and -300 series airplanes
	767-200, -300, -300F, and -400ER series airplanes
	777-200, -200LR, -300, -300ER, and 777F series airplanes
Gulfstream Aerospace Company	G-IV airplanes

McDonnell Douglas Corporation	DC-8-11, DC-8-12, DC-8-21, DC-8-31, DC-8-32, DC-8-33, DC-8-41, DC-8-42, DC-8-43, DC-8-51, DC-8-52, DC-8-53, and DC-8-55 airplanes
	DC-9-11, DC-9-12, DC-9-13, 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-9-32F (C-9A, C-9B), DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, DC-9-51, DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), and DC-9-87 (MD-87) airplanes
	DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), and DC-10-40 airplanes
	MD-10-10F and MD-10-30F airplanes
	MD-11 and MD-11F airplanes
	MD-88 airplanes
	MD-90-30 airplanes
Short Brothers	SD3-30, SD3-SHERPA, and SD3-60 SHERPA airplanes

**Subject**

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

**Unsafe Condition**

(e) This AD was prompted by the reported rupture of a high-pressure gaseous oxygen cylinder, which had insufficient strength characteristics due to improper heat treatment. The Federal Aviation Administration is issuing this AD to prevent an oxygen cylinder from rupturing, which, depending on the location, could result in structural damage and rapid decompression of the airplane, damage to adjacent essential flight equipment, deprivation of the necessary oxygen supply for the flightcrew, and injury to cabin occupants or maintenance or other support personnel.

**Compliance**

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

**Inspection**

(g) Within 90 days after the effective date of this AD, inspect to determine the serial number of the oxygen cylinder assemblies installed in the airplane. The serial number is stamped into the steel cylinder near the neck. A review of airplane records is acceptable in lieu of this inspection if the serial numbers of the oxygen cylinder assemblies can be conclusively determined from that review. For any oxygen cylinder assembly that has a serial number identified in Table 3 of this AD: Remove it from the airplane before further flight.

**Table 3—Affected Oxygen Cylinder Assembly Serial Numbers**

<b>Cylinder Manufacturer</b>	<b>Affected Serial Numbers</b>
AVOX Systems	ST82307 through ST82309 inclusive
	ST82335 through ST82378 inclusive
	ST82385 through ST82506 inclusive, except for S/N ST82498, which ruptured
	ST82550 through ST82606 inclusive
	ST82617 through ST82626 inclusive
	ST83896 through ST83905 inclusive
	ST84209 through ST84218 inclusive
	ST84224 through ST84236 inclusive
	ST86138, ST86143, ST86145, ST86150, ST86169, ST86172, ST86177
	ST86299 through ST86307 inclusive
B/E Aerospace	K495120 through K495121 inclusive
	K617383 through K617423 inclusive
	K629573 through K629577 inclusive
	K674451 through K674455 inclusive
	K757064 through K757066 inclusive

**Parts Installation**

(h) As of the effective date of this AD, no person may install, on any airplane, a United States Department of Transportation Type 3HT oxygen cylinder assembly that has a part number identified in Table 1 of this AD and a serial number identified in Table 3 of this AD.

**Alternative Methods of Compliance (AMOCs)**

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

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

**Material Incorporated by Reference**

(j) None.

Issued in Renton, Washington, on November 25, 2009.  
Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-24-01 Pratt & Whitney:** Amendment 39-16087. Docket No. FAA-2009-0317; Directorate Identifier 79-ANE-18.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 4, 2010.

**Affected ADs**

- (b) This AD supersedes AD 87-14-01 R1, Amendment 39-6359.

**Applicability**

(c) This AD applies to Pratt & Whitney JT8D-7, -7A, -7B, -9, -9A, -11, -15, and -17 turbofan engines, with 2nd stage fan blades, part number (P/N) 433802, 645902, 759902, 695932, 678102, or 746402, installed. These engines are installed on, but not limited to, Boeing 727, 737, and McDonnell Douglas DC-9 series airplanes.

**Unsafe Condition**

(d) This AD results from reports of 10 fractures of 2nd stage fan blades since AD 87-14-01R1 became effective. We are issuing this AD to prevent uncontained failure of 2nd stage fan blades, 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.

**2nd Stage Fan Blade Inspections**

(f) For 2nd stage fan blades, P/N 678102 and P/N 746402, perform an eddy current inspection (ECI) of the blade pin-root holes for cracks, and for 2nd stage fan blades, P/Ns 433802, 645902, 759902, and 695932, perform an ECI of the blade pin-root holes and perform an ultrasonic inspection (UI) of the blade root attachment for cracks, as follows:

(1) Perform an inspection at the first disassembly of the 2nd stage fan rotor from the low-pressure (LP) compressor after accumulation of 3,000 cycles-in-service (CIS) since the last inspection of the blade root attachment, not to exceed 10,000 CIS since last inspection.

(2) If the 2nd stage fan blades were new at their last installation onto the 2nd stage fan disk, inspect at the first disassembly of the 2nd stage fan rotor from the LP compressor after accumulating 3,000 cycles-since-new (CSN), not to exceed 10,000 CSN.

(3) Thereafter, inspect the 2nd stage fan blades at each disassembly of the 2nd stage fan rotor from the LP compressor after accumulating 3,000 CIS, not to exceed 10,000 CIS since the last inspection.

(4) Guidance on performing ECIs and UIs of the 2nd stage fan blade pin-root holes and blade root attachments can be found in Pratt & Whitney Maintenance Advisory Notice MAN-JT8D-1-08. Contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503, for a copy of this service information.

(5) Remove from service before further flight any 2nd stage fan blades that are found cracked.

### **Optional Terminating Action**

(g) For JT8D-9, -9A, -11, -15, and -17 engines, as optional terminating action to the repetitive inspections required by this AD, replace the affected 2nd stage fan blades with redesigned 2nd stage fan blades using Pratt & Whitney Service Bulletin No. 5866, Revision 2, dated October 20, 1998.

### **Alternative Methods of Compliance**

(h) 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**

(i) Contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; telephone (781) 238-7117, fax (781) 238-7199, for more information about this AD.

### **Material Incorporated by Reference**

(j) You must use Pratt & Whitney Service Bulletin No. 5866, Revision 2, dated October 20, 1998, to perform the optional terminating action in 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 Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on November 9, 2009.

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



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**2009-24-04 Rolls-Royce Corporation (formerly Allison Engine Company):** Amendment 39-16091. Docket No. FAA-2009-0246; Directorate Identifier 2009-NE-04-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective December 28, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Rolls-Royce Corporation (RRC) AE 3007A1/1, AE 3007A1/3, AE 3007A1, AE 3007A1E, AE 3007A1P, AE 3007A3, AE 3007C, and AE 3007C1 turbofan engines with a fan spinner part number (P/N) 23070964 or P/N 23078783, installed. These engines are installed on, but not limited to, Embraer EMB-135, EMB-145, and Cessna Citation X airplanes.

**Unsafe Condition**

(d) This AD results from a report of a fan spinner releasing from an AE 3007A turbofan engine during flight. We are issuing this AD to prevent the fan spinner from releasing, which could result in injury, damage to the engine, 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.

**Replacement of the Fan Spinner**

(f) For RRC AE 3007A1/1, AE 3007A1/3, AE 3007A1, AE 3007A1E, AE 3007A1P, and AE 3007A3 turbofan engines, remove fan spinner P/N 23070964 or P/N 23078783 at the next shop visit, but no later than 4,000 additional cycles-in-service (CIS) after the effective date of this AD, and install an approved P/N fan spinner.

(g) For RRC AE 3007C and AE 3007C1 turbofan engines, remove fan spinner P/N 23070964 or P/N 23078783 at the next shop visit, but no later than 4,000 additional CIS after the effective date of this AD, and install an approved P/N fan spinner.

## **Fan Spinner Installation Prohibition**

(h) After the effective date of this AD, do not install any fan spinner P/N 23070964 or P/N 23078783 on any Rolls Royce Corporation engine.

## **Definition**

(i) For the purpose of this AD, a shop visit is induction of the engine into the engine maintenance shop for any cause.

## **Alternative Methods of Compliance**

(j) The Manager, Chicago 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**

(k) Contact Michael Downs, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Avenue, Des Plaines, IL 60018; e-mail: michael.downs@faa.gov; telephone: (847) 294-7870; fax: (847) 294-7834, for more information about this AD.

(l) Rolls-Royce Corporation Service Bulletin (SB) No. AE 3007A-72-361, dated June 26, 2008, and SB No. AE 3007C-72-285, dated June 26, 2008, pertain to the subject of this AD. Contact Rolls-Royce Corporation, P.O. Box 420, Indianapolis, IN 46206; telephone (317) 230-3774; fax (317) 230-8084; e-mail: indy.pubs.services@rolls-royce.com, for a copy of this service information.

## **Material Incorporated by Reference**

(m) None.

Issued in Burlington, Massachusetts, on November 13, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



**2009-24-05 Rolls-Royce plc:** Amendment 39-16092. Docket No. FAA-2009-0674; Directorate Identifier 2009-NE-25-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective January 4, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Rolls-Royce plc models RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan engines with fuel-to-oil heat exchangers, part numbers 55003001-1 and 55003001-11, installed. These engines are installed on, but not limited to, Boeing 777 series airplanes.

**Reason**

(d) This AD results from the risk of engine fuel-to-oil heat exchanger (FOHE) blockage. We are issuing this AD to prevent ice from blocking the FOHE, which could result in an unacceptable engine power loss and loss of control of the airplane.

**Actions and Compliance**

(e) Unless already done, within 6,000 flight hours after the effective date of this AD, but no later than January 1, 2011, replace the FOHE, P/N 55003001-1 or 55003001-11, with an FOHE modified using Rolls-Royce plc Alert Service Bulletin No. RB.211-79-AG257, Revision 1, dated September 14, 2009.

**FAA AD Differences**

(f) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) by requiring replacing the FOHE within 6,000 flight hours after the effective date of this AD, rather than within 6,000 flight hours from July 10, 2009.

## **Other FAA AD Provisions**

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

## **Related Information**

(h) Refer to MCAI Airworthiness Directive 2009-0142, dated July 13, 2009, and Rolls-Royce plc Alert Service Bulletin No. RB.211-79-AG257, Revision 1, dated September 14, 2009, for related information. 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.

(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.

## **Material Incorporated by Reference**

(j) You must use Rolls-Royce plc Alert Service Bulletin No. RB.211-79-AG257, Revision 1, dated September 14, 2009, to perform the FOHE modification 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, UK; 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 November 16, 2009.

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



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**2009-24-06 General Electric Company:** Amendment 39-16094. Docket No. FAA-2008-0821; Directorate Identifier 2008-NE-20-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective December 28, 2009.

**Affected ADs**

(b) This AD supersedes AD 2008-16-01, Amendment 39-15619.

**Applicability**

(c) This AD applies to General Electric Company (GE) CF34-8E series turbofan engines with full authority digital electronic controls (FADECs), part numbers (P/Ns) 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, or 111E9320G49 installed. These engines are installed on, but not limited to, Empresa Brasileira de Aeronautica S.A. (EMBRAER) ERJ 170 series airplanes.

**Unsafe Condition**

(d) This AD results from 20 additional reports received of loss of thrust control events since AD 2008-16-01 was issued. We are issuing this AD to prevent loss of thrust control of the airplane.

**Compliance**

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

**Removal of CF34-8E FADECs**

(f) Within 660 flight hours time-in-service (TIS) after the effective date of this AD, remove FADEC P/Ns 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, and 111E9320G49.

### **Installation Prohibition**

(g) After 660 flight hours TIS after the effective date of this AD, do not install any FADEC P/N 4120T00P31, 4120T00P32, 4120T00P41, 4120T00P42, 4120T00P43, 4120T00P44, 4120T00P47, 4120T00P48, 111E9320G32, 111E9320G33, 111E9320G42, 111E9320G43, 111E9320G44, 111E9320G45, 111E9320G48, or 111E9320G49 onto any GE CF34-8E series engine.

### **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 Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: alan.strom@faa.gov; telephone (781) 238-7143; fax (781) 238-7199, for more information about this AD.

(j) Guidance on removal and replacement with an FAA-approved FADEC software version can be found in GE Alert Service Bulletin No. CF34-8E-AL S/B 73-A0020, dated November 12, 2008. For a copy of this service information, contact General Electric Company, GE-Aviation, Room 285, 1 Newmann Way, Cincinnati, OH 45215, telephone (513) 552-3272; fax (513) 552-3329; e-mail: geae.aoc@ge.com.

### **Material Incorporated by Reference**

(k) None.

Issued in Burlington, Massachusetts, on November 16, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



**2009-24-07 Boeing:** Amendment 39-16095. Docket No. FAA-2009-0411; Directorate Identifier 2008-NM-190-AD.

**Effective Date**

- (a) This airworthiness directive (AD) is effective January 4, 2010.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Boeing Model 737-600, -700, -700C, and -800 series airplanes, certificated in any category; as identified in Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008.

**Subject**

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

**Unsafe Condition**

(e) This AD results from a report indicating that the protective finishes on the main landing gear (MLG) forward trunnion pins might have been damaged during final assembly. We are issuing this AD to prevent stress corrosion cracking of the forward trunnion pins, which could result in fracture of the pins and consequent collapse of the MLG.

**Compliance**

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

**Lubrication**

(g) Within 30 days after the effective date of this AD: Lubricate the left and right MLG forward trunnion pins in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008. Repeat the lubrication at intervals not to exceed 30 days until all applicable requirements of paragraph (h) of this AD have been accomplished.

## **Inspection and Corrective Actions**

(h) Within 60 months after the date of issuance of the original airworthiness certificate or date of issuance of the original export certificate of airworthiness, or within 6 months after the effective date of this AD, whichever occurs later: Except as provided by paragraph (j) of this AD, do a detailed inspection for discrepancies (including finish damage, corrosion, pitting, and base metal scratches) of the transition radius of the left and right MLG trunnion pins, in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008. Except as provided by paragraph (j) of this AD, at the times specified in paragraph 1.E., "Compliance," of the service bulletin, do all applicable repetitive inspections and corrective actions, in accordance with the service bulletin. Accomplishing the detailed inspections (initial and repetitive) and all applicable corrective actions specified in this paragraph terminates the repetitive lubrication requirements of paragraph (g) of this AD.

## **No Report Required**

(i) Although Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008, specifies to send inspection reports to the manufacturer, this AD does not include that requirement.

## **Optional Terminating Action**

(j) Overhauling or replacing a trunnion pin in accordance with the Accomplishment Instructions of Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008, ends the repetitive lubrication requirements of paragraph (g) of this AD, and the actions required by paragraph (h) of this AD, for that pin.

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

(k)(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 and the approval must specifically refer to this AD.

**Material Incorporated by Reference**

(1) You must use Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008, to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the optional terminating action specified in this AD, you must use Boeing Special Attention Service Bulletin 737-32-1402, dated August 6, 2008, to do those actions, unless the AD specifies otherwise.

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

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

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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 November 12, 2009.

Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2009-24-08 Boeing:** Amendment 39-16096. Docket No. FAA-2009-0571; Directorate Identifier 2009-NM-004-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective January 4, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Boeing Model 777-200, -200LR, -300, and -300ER series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008.

**Subject**

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

**Unsafe Condition**

(e) This AD results from reports of scribe lines found at lap joints and butt joints, around external doublers, and at locations where external decals had been cut. We are issuing this AD to detect and correct scribe lines, which can develop into fatigue cracks in the skin. Undetected fatigue cracks can grow and cause sudden decompression of the airplane.

**Compliance**

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

**Inspection**

(g) At the applicable times specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, except as provided in paragraphs (h) and (j) of this AD, do detailed exploratory inspections for scribe lines in the skin along lap joints, butt joints, certain external doublers, and the large cargo door hinges. Do all applicable related investigative and corrective actions at the times specified in the service bulletin, by accomplishing all actions specified

in the Accomplishment Instructions of the service bulletin, except as provided by paragraph (i) of this AD.

**Note 1:** The inspection exemptions described in NOTES 1.-5. in paragraph 1.E. of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, apply to this AD.

### **Exceptions to Service Bulletin Specifications**

(h) Where Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, specifies a compliance time after the date on the service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

(i) Where Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, specifies to contact Boeing for appropriate action, accomplish applicable actions using a method approved in accordance with the procedures specified in paragraph (l) of this AD.

(j) Where paragraph 1.E. of Boeing Alert Service Bulletin 777-53A0054, dated August 7, 2008, specifies to “contact Boeing for inspection requirements for operation beyond 60,000 total flight-cycles after first repaint,” for those airplanes, this AD requires contacting the Manager, Seattle Aircraft Certification Office (ACO), for all inspection requirements of this AD and doing the requirements.

### **Report**

(k) At the applicable time specified in paragraph (k)(1) or (k)(2) of this AD: Submit a report of positive findings of cracks found during the inspection required by paragraph (g) of this AD to the Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Alternatively, operators may submit reports to their Boeing field service representatives. The report must contain, at a minimum, the inspection results, a description of any discrepancies found, the airplane serial number, and the number of flight cycles and flight hours on the airplane. 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 contained in this AD and has assigned OMB Control Number 2120-0056.

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

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

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

(l)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Berhane Alazar, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6577; 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**

(m) You must use Boeing Alert Service Bulletin 777-53A0054, dated August 7, 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 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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on November 12, 2009.

Stephen P. Boyd,

Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-28169 Filed 11-25-09; 8:45 am]



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**2009-24-09 AIRBUS:** Amendment 39-16068. Docket No. FAA-2009-1092; Directorate Identifier 2009-NM-219-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes, all manufacturer serial numbers; and Model A340-211, -212, -213, -311, -312, and -313 series airplanes, all manufacturer serial numbers; certificated in any category.

**Subject**

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

**Reason**

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

An A330 operator experienced a low level of the Yellow hydraulic circuit due to a loose[ning] of check valve part number (P/N) CAR401. During the inspection on the other two hydraulic systems, the other three CAR401 check valves were also found to be loose with their lock wire broken in two instances.

A340 aeroplanes are also equipped with the same high pressure manifold check valves.

Investigations are on-going to determine the root cause of this event.

Additional cases of CAR401 check valve loosening have been experienced in service on aeroplanes having accumulated more than 1000 flight cycles (FC). The check valve fitted on the Yellow hydraulic system is more affected, probably due to additional system cycles induced by cargo door operation.

The loss of torque due to pressure cycles could contribute to check valve loosening, resulting in a leak and finally the loss of the associated hydraulic system and, in the worst case, of the three hydraulic systems of the aeroplane.

This AD requires to perform the following inspection programme to detect any check valve loosening and, if necessary, apply the associated corrective actions:

1st Step: On yellow and blue hydraulic circuits: lock wire inspection, inspection for traces of seepage or black deposit, check valve torque and red marking application.

2nd Step: On green hydraulic circuit: same inspections as required in 1st Step and on yellow and blue hydraulic circuits: inspection of check valves for condition.

Finally: On green, yellow and blue hydraulic circuits: repetitive inspection of check valves for condition.

The unsafe condition is the possible loss of all three hydraulic systems, which could result in loss of control of the airplane. The inspection program involves a detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, an inspection for proper torque, and a detailed inspection to determine alignment of the check valve and manifold. The corrective actions include replacing seal assemblies, replacing the check valve, removing the lock wire, and re-torquing the check valve. The required actions also include installing a new lock wire.

## Compliance

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

## Actions

(g) Do the actions required by paragraphs (g)(1) through (g)(3) of this AD.

(1) For airplanes that do not have Airbus Modification 54491 embodied in production, or Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 embodied in service: Within 100 flight cycles or 28 days after the effective date of this AD, whichever occurs first, inspect the check valves on the blue, green, and yellow hydraulic systems to identify their P/Ns, in accordance with the instructions of Airbus All Operators Telex (AOT) A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes).

(i) If check valves having P/N CAR401 are installed on all three hydraulic systems, before further flight, do the actions specified in paragraph (g)(2)(i) of this AD. After accomplishing the actions required by paragraph (g)(2)(i) of this AD, do the actions specified in paragraphs (g)(2)(ii) and (g)(2)(iii) of this AD at the applicable compliance times specified in those paragraphs.

(ii) If check valves having P/N CAR401 are not installed on all three hydraulic systems, no further action is required until any check valve having P/N CAR400 is replaced with a check valve having P/N CAR401. If any check valve having P/N CAR400 is replaced by a check valve having P/N CAR401, before further flight, do the inspection specified in paragraph (g)(1) of this AD to determine if all three hydraulic systems are equipped with check valve having P/N CAR401.

(2) For airplanes on which Airbus Modification 54491 was embodied in production, or Airbus Service Bulletin A330-29-3101 or Airbus Service Bulletin A340-29-4078 was embodied in service, do the actions specified in paragraphs (g)(2)(i), (g)(2)(ii), and (g)(2)(iii) of this AD.

(i) Except as required by paragraph (g)(1)(i) of this AD, at the applicable times specified in paragraphs (g)(2)(i)(A) and (g)(2)(i)(B) of this AD, as applicable: Do the inspection program (detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) on yellow and blue high pressure manifolds, install new lock wires, and do all applicable corrective actions, in accordance with the instructions of paragraph 4.1.1 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or AOT A340-29A4086, Revision 1, dated October

8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight.

(A) For airplanes on which Airbus Modification 54491 has been embodied in production: At the later of the times specified in paragraphs (g)(2)(i)(A)(1) and (g)(2)(i)(A)(2) of this AD.

(1) Before the accumulation of 1,000 total flight cycles since first flight but no earlier than the accumulation of 700 total flight cycles since first flight.

(2) Within 100 flight cycles or 28 days after the effective date of this AD, whichever occurs first.

(B) For airplanes on which Airbus Service Bulletin A330-29-3101 or A340-29-4078 was embodied in service: At the later of the times specified in paragraphs (g)(2)(i)(B)(1) and (g)(2)(i)(B)(2) of this AD.

(1) Within 1,000 flight cycles since the embodiment of Airbus Service Bulletin A330-29-3101 or A340-29-4078 but no earlier than 700 flight cycles after the embodiment of Airbus Service Bulletin A330-29-3101 or A340-29-4078.

(2) Within 100 flight cycles or 28 days after the effective date of this AD, whichever occurs first.

(ii) Within 900 flight hours after accomplishment of paragraph (g)(2)(i) of this AD, do the inspection program (detailed inspection of the lock wire for presence and integrity, a detailed inspection for traces of seepage or black deposits, and an inspection for proper torque) and install a new lock wire on the green high pressure manifold; and do an inspection (detailed inspection for traces of seepage or black deposits, and detailed inspection to determine alignment of the check valve and manifold) on the yellow and blue high pressure manifolds, and do all applicable corrective actions; in accordance with the instructions of paragraph 4.1.2 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight.

(iii) Within 900 flight hours after accomplishment of paragraph (g)(2)(ii) of this AD, and thereafter at intervals not to exceed 900 flight hours, do the inspection program (detailed inspection for traces of seepage or black deposits, and detailed inspection to determine alignment of the check valve and manifold) on the green, yellow, and blue high pressure manifolds, and do all applicable corrective actions, in accordance with the instructions of paragraph 4.1.3 of Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes). Do all applicable corrective actions before further flight.

(iv) Actions accomplished before the effective date of this AD, according to Airbus AOT A330-29A3111, dated September 2, 2009 (for Model A330-200 and -300 series airplanes); or AOT A340-29A4086, dated September 2, 2009 (for Model A340-200 and -300 series airplanes); are considered acceptable for compliance with the corresponding actions specified in paragraph (g)(2)(i) of this AD.

(3) Within 10 days after accomplishment of the inspections specified in paragraphs (g)(1) and (g)(2) of this AD, or within 10 days after the effective date of this AD, whichever occurs later, report all inspection results to Airbus in accordance with Airbus AOT A330-29A3111, Revision 1, dated October 8, 2009 (for Model A330-200 and -300 series airplanes); or AOT A340-29A4086, Revision 1, dated October 8, 2009 (for Model A340-200 and -300 series airplanes).

## **FAA AD Differences**

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

## **Other FAA AD Provisions**

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

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

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

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

## **Related Information**

(i) Refer to MCAI European Aviation Safety Agency Emergency Airworthiness Directive 2009-0223-E, dated October 13, 2009; and Airbus AOTs A330-29A3111 and A340-29A4086, both Revision 1, both dated October 8, 2009; for related information.

## **Material Incorporated by Reference**

(j) You must use Airbus All Operators Telex A330-29A3111, Revision 1, dated October 8, 2009; or Airbus All Operators Telex A340-29A4086, Revision 1, dated October 8, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. (Only the first page of these documents contains the document number, revision level, and date; no other page of these documents contain this information.)

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

(2) For service information identified in this AD, contact Airbus 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](mailto: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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

Issued in Renton, Washington, on November 16, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.  
[FR Doc. E9-28069 Filed 11-25-09; 8:45 am]



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**2009-24-11 General Electric Company:** Amendment 39-16103. Docket No. FAA-2009-0328; Directorate Identifier 2008-NE-44-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective January 4, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to General Electric Company (GE) CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1 turbofan engines. These engines are installed on, but not limited to, Bombardier Canadair Models CL-600-2A12, CL-600-2B16, and CL-600-2B19 airplanes.

**Unsafe Condition**

(d) This AD results from a report of an under-cowl fire and a failed fan blade. We are issuing this AD to prevent failure of certain part number (P/N) and serial number (SN) fan blades and aft actuator head hoses, which could result in an under-cowl fire and subsequent 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.

**CF34-3A1 and CF34-3B1 Engines**

(f) For CF34-3A1 engines with fan drive shaft, P/N 6036T78P02, and airworthiness limitation section life limit of 22,000 CSN; and

(g) For CF34-3A1 engines with fan drive shaft, P/N 6036T78P02, and airworthiness limitation section life limit of 15,000 CSN that are in compliance with GE Aircraft Engines (GEAE) Service Bulletin (SB) CF34-AL S/B 72-0147, dated May 21, 2003, Revision 01, dated October 17, 2003, Revision 02, dated August 5, 2004, or Revision 3, dated August 28, 2003; and

(h) For CF34-3B1 engines with fan blades, P/Ns 6018T30P14 or 4923T56G08, that have a fan blade SN listed in Appendix A of GEAE SB CF34-AL S/B 72-0245, Revision 01, dated July 30, 2008;

(i) Do the following for the engines meeting the criteria in paragraph (f), (g), or (h) of this AD, as applicable:

(1) Remove fan blades from service within 4,000 cycles-in-service (CIS) after the effective date of this AD or by December 31, 2010, whichever occurs first.

### **Initial Visual Inspection of the Fan Blade Abradable Rub Strip for Wear**

(2) For fan blades with 1,200 or more cycles-since-new (CSN) on the effective date of this AD, perform an initial visual inspection of the fan blade abradable rub strip for wear within 20 CIS after the effective date of this AD. Use paragraphs 3.A.(1) through 3.A.(2) of the Accomplishment Instructions of GEAE SB CF34-AL S/B 72-0250, Revision 01, dated November 26, 2008, to perform the inspection.

(3) For fan blades with fewer than 1,200 CSN on the effective date of this AD, perform an initial visual inspection of the fan blade abradable rub strip for wear within 1,220 CSN. Use paragraphs 3.A.(1) through 3.A.(2) of the Accomplishment Instructions of GEAE SB CF34-AL S/B 72-0250, Revision 01, dated November 26, 2008, to perform the inspection.

(4) If you find a continuous 360 degree rub indication, before further flight, visually inspect the fan blades using paragraphs 3.A.(2)(a) through 3.A.(2)(b) of the Accomplishment Instructions of GEAE SB CF34-AL S/B 72-0250, Revision 01, dated November 26, 2008.

(5) If you find a crack in the retaining pin holes of the fan blade, remove the blade from service.

### **Repetitive Visual Inspection of the Fan Blade Abradable Rub Strip for Wear**

(6) Within 75 cycles-since-last inspection (CSLI) or 100 hours-since-last-inspection (HSLI), whichever occurs later, perform a visual inspection of the fan blade abradable rub strip for wear. Use paragraphs 3.A.(1) through 3.A.(2) of the Accomplishment Instructions of GEAE SB CF34-AL S/B 72-0250, Revision 01, dated November 26, 2008, to perform the inspection.

(i) If you find a continuous 360 degree rub indication, before further flight, visually inspect the fan blades using paragraphs 3.A.(2)(a) through 3.A.(2)(b) of the Accomplishment Instructions of GEAE SB CF34-AL S/B 72-0250, Revision 01, dated November 26, 2008.

(ii) If you find a crack in the retaining pin holes of the fan blade, remove the blade from service.

### **Inspection of the Aft Actuator Head Hose Fitting on CF34-3A1 and CF34-3B1 Engines**

(7) Within 750 hours time-in-service (TIS) after the effective date of this AD, visually inspect and, if necessary, reposition the aft actuator head hose fitting. Use paragraph 3.A of the Accomplishment Instructions of GEAE SB CF34-AL S/B 73-0046, Revision 02, dated August 27, 2008, to perform the inspection.

### **CF34-1A, CF34-3A, CF34-3A2, CF34-3B, and CF34-3A1 Engines**

(j) For CF34-3A1 engines with fan drive shaft, P/N 6036T78P02, and airworthiness limitation section life limit of 15,000 CSN, that are not in compliance with GEAE SB CF34-AL S/B 72-0147, dated May 21, 2003, Revision 01, dated October 17, 2003, Revision 02, dated August 5, 2004, or Revision 3, dated August 28, 2003; and

(k) For CF34-1A, CF34-3A, CF34-3A2, and CF34-3B engines with fan blades, P/N 6018T30P14 or P/N 4923T56G08, that have a fan blade SN listed in Appendix A of GEAE SB CF34-BJ S/B 72-0229, Revision 01, dated July 30, 2008;

(l) Do the following for the engines meeting the criteria in paragraph (j) or (k) of this AD as applicable:

(1) Remove fan blades, P/N 6018T30P14, from service within 2,400 CSN.

(2) Remove fan blades, P/N 4923T56G08, from service within 1,200 CIS since the bushing repair of the fan blade hole.

### **Initial Eddy Current Inspection of the Fan Blades**

(3) For fan blades, P/N 6018T30P14, with more than 850 CSN, perform an initial eddy current inspection (ECI) of the fan blades for cracks within 350 CIS after the effective date of this AD. Use paragraphs 3.A. or 3.B. of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0229, Revision 01, dated July 30, 2008, to perform the inspection.

(4) For fan blades, P/N 6018T30P14, with 850 or fewer CSN on the effective date of this AD, perform an initial ECI of the fan blades for cracks within 1,200 CSN. Use paragraphs 3.A. or 3.B. of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0229, Revision 01, dated July 30, 2008, to perform the inspection.

(5) If you find a crack in the retaining pin holes of the fan blade, remove the blade from service.

### **Repetitive ECI of the Fan Blades**

(6) For fan blades, P/N 6018T30P14, within 600 CSLI, perform an ECI of the fan blades for cracks. Use paragraphs 3.A. or 3.B. of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0229, Revision 01, dated July 30, 2008, to perform the inspection.

(7) If you find a crack in the retaining pin holes of the fan blade, remove the blade from service.

### **Initial Visual Inspection of the Fan Blade Abradable Rub Strip for Wear**

(8) For engines with fan blades, P/N 6018T30P14, installed that have a fan blade SN listed in Appendix A of GEAE SB CF34-BJ S/B 72-0229, Revision 01, dated July 30, 2008, with 1,200 or more CSN on the effective date of this AD, and that haven't had an ECI of the fan blades for cracks, do the following:

(i) Perform an initial inspection of the fan blade abradable rub strip for wear within 20 CIS after the effective date of this AD. Use paragraph 3.A.(1) of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0231, Revision 02, dated November 26, 2008, to perform the inspection.

(ii) If you find a continuous 360 degree rub indication, before further flight, perform a visual inspection of the fan blades for cracks. Use paragraphs 3.A(2)(a) or 3.A(2)(b) of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0231, Revision 02, dated November 26, 2008, to perform the inspection.

(iii) If you find a crack in the retaining pin holes of the fan blade, remove the blade from service.

### **Repetitive Inspection of the Fan Blade Abradable Rub Strip for Wear**

(9) For engines with fan blades, P/N 6018T30P14, installed, if you have performed an ECI of the fan blade, you don't need to inspect the fan blade abradable rub strip for wear.

(10) For engines with fan blades, P/N 6018T30P14, installed, within 75 CSLI or 100 HSLI, whichever occurs later, do the following:

(i) Perform a visual inspection of the fan blade abradable rub strip for wear. Use paragraph 3.A.(1) of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0231, Revision 02, dated November 26, 2008, to perform the inspection.

(ii) If you find a continuous 360 degree rub indication, before further flight, visually inspect the fan blades using paragraphs 3.A.(2)(a) through 3.A.(2)(b) of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 72-0231, Revision 02, dated November 26, 2008.

(iii) If you find a crack in the retaining pin holes of the fan blade, remove the blade from service.

### **Inspection of the Aft Actuator Head Hose Fitting on CF34-3A1 and CF34-3B Engines**

(11) For CF34-3A1 engines, within 300 hours TIS after the effective date of this AD, visually inspect and, if necessary, reposition the aft actuator head hose fitting. Use paragraph 3.A of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 73-0062, Revision 02, dated August 27, 2008, to perform the inspection.

(12) For CF34-3B engines, within 400 hours TIS after the effective date of this AD, visually inspect and, if necessary, reposition the aft actuator head hose fitting. Use paragraph 3.A of the Accomplishment Instructions of GEAE SB CF34-BJ S/B 73-0062, Revision 02, dated August 27, 2008, to perform the inspection.

### **Credit for Previous Actions**

(m) Inspections previously performed using the following GEAE SBs meet the requirements specified in the indicated paragraphs:

(1) CF34-AL S/B 72-0250, dated August 15, 2008, meet the requirements specified in paragraphs (i)(2) through (i)(4) of this AD.

(2) CF34-AL S/B 73-0046, Revision 01, dated July 1, 2008, or earlier issue, meet the requirements specified in paragraph (i)(7) of this AD.

(3) CF34-BJ S/B 72-0229, dated April 10, 2008, meet the requirements specified in paragraphs (l)(3) and (l)(4) of this AD.

(4) CF34-BJ S/B 72-0231, Revision 01, dated October 1, 2008, or earlier issue, meet the requirements specified in paragraphs (l)(10)(i) and (l)(10)(ii) of this AD.

(5) CF34-BJ S/B 73-0062, Revision 01, dated July 1, 2008, or earlier issue, meet the requirements specified in paragraphs (l)(11) and (l)(12) of this AD.

### **Installation Prohibitions**

(n) After the effective date of this AD:

(1) Do not install any fan blade into any CF34-3A1 engine with fan drive shaft, P/N 6036T78P02, with an airworthiness limitation section life limit of 22,000 CSN if that fan blade:

(i) Was installed in a CF34-3A1 engine with fan drive shaft, P/N 6036T78P02, with an airworthiness limitation section life limit of 15,000 CSN; and

(ii) Is listed in Appendix A of GEAE SB CF34-BJ S/B 72-0229, Revision 01, dated July 30, 2008; or

(iii) Is listed in Appendix A of GEAE SB CF34-BJ S/B 72-0230, Revision 01, dated July 30, 2008.

(2) Do not install any fan blade into any CF34-3A1 engine with fan drive shaft, P/N 6036T78P02, with an airworthiness limitation section life limit of 15,000 CSN if that fan blade:

(i) Was installed in any CF34-3A1 engine with fan drive shaft, P/N 6036T78P02, with an airworthiness limitation section life limit of 22,000 CSN and,

(ii) Is listed in Appendix A of GEAE SB CF34-AL S/B 72-0245, Revision 01, dated July 3, 2008.

### **Alternative Methods of Compliance**

(o) 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**

(p) Contact John Frost, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: john.frost@faa.gov; telephone (781) 238-7756; fax (781) 238-7199, for more information about this AD.

### **Material Incorporated by Reference**

(q) You must use the GE Aircraft Engines service information specified in the following Table 1 to do the actions required by this AD.

**Table 1 - Material Incorporated by Reference**

<b>Service Bulletin No.</b>	<b>Page</b>	<b>Revision</b>	<b>Date</b>
CF34-AL S/B 73-0046	All	02	August 27, 2008
Total Pages: 8			
CF34-BJ S/B 73-0062	All	02	August 27, 2008
Total Pages: 8			
CF34-BJ S/B 72-0229	All	01	July 30, 2008
Total Pages: 158			
CF34-BJ S/B 72-0230	All	01	July 30, 2008
Total Pages: 153			
CF34-BJ S/B 72-0231	All	02	November 26, 2008
Total Pages: 8			
CF34-AL S/B 72-0245	All	01	July 03, 2008
Total Pages: 153			
CF34-AL S/B 72-0250	All	01	November 26, 2008
Total Pages: 9			

(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 General Electric Company, GE-Aviation, Room 285, 1 Newmann Way, Cincinnati, OH 45215, telephone (513) 552-3272; fax (513) 552-3329; e-mail: geae.aoc@ge.com.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on November 18, 2009.

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



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**2009-24-17 Boeing:** Amendment 39-16111. Docket No. FAA-2009-0553; Directorate Identifier 2008-NM-199-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Boeing Model 747-100, 747-100B, 747-200B, 747-200C, 747-200F, and 747SR series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 747-53A2751, dated October 9, 2008.

**Subject**

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

**Unsafe Condition**

(e) This AD results from a report of broken and cracked frame shear ties, cracks on the frame doubler and frame web, and missing fasteners in the stringer (S)-10L stringer-to-stringer clip joint at the station (STA) 820 frame. We are proposing this AD to detect and correct missing fasteners at the stringer-to-stringer clip joints, which could result in shear tie and skin cracks and rapid in-flight decompression of the airplane.

**Compliance**

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

**Inspection for Missing Fasteners**

(g) Within 3,000 flight cycles after the effective date of this AD: Do a one-time general visual inspection for missing fasteners in the left and right side S-10, S-10A, and S-11 stringer-to-stringer clip joints at the STA 760 through 940 frames, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2751, dated October 9, 2008. If any fasteners are missing, before further flight, do detailed and surface high frequency eddy current inspections to detect

cracking of the adjacent frame and skin structure in accordance with the Accomplishment Instructions of the service bulletin. Install all missing fasteners before further flight.

(h) If any crack is found during the inspection required by paragraph (g) of this AD: Before further flight, repair any cracked shear ties, frame web, and/or skin in accordance with Boeing Alert Service Bulletin 747-53A2751, dated October 9, 2008.

(i) If any repair is done in accordance with paragraph (h) of this AD, before 20,000 total flight cycles or within 3,000 flight cycles from the repair installation, whichever occurs later: Do a detailed inspection of the repair(s) and the adjacent structure within 10 inches of the repair(s) for cracking. Repeat the inspection thereafter at intervals not to exceed 3,000 flight cycles. If any crack is found during this inspection, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

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

(j)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Nick Kusz, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6449; 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, in the FAA Flight Standards District Office (FSDO), or lacking a principal inspector, your local FSDO. 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**

(k) You must use Boeing Alert Service Bulletin 747-53A2751, dated October 9, 2008, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Boeing Commercial Airplanes, P.O. Box 3707, Seattle, Washington 98124-2207; telephone 206-544-9990; fax 206-766-5682; e-mail DDCS@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 November 19, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-24-18 Bombardier, Inc. (Formerly Canadair):** Amendment 39-16112. Docket No. FAA-2009-0565; Directorate Identifier 2008-NM-217-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 8, 2010.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to all Bombardier Model CL-600-2A12 (CL-601) and CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604) airplanes, 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 76: Engine controls.

**Reason**

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

There have been various reported incidents of throttle jam and engine shutdowns, caused by premature wear of the rack and pinion mechanism of part number (P/N) 2100140-005 and -007 Engine Throttle Control Gearbox (ETCG), installed on Bombardier CL-601 and 604 aircraft.

Bombardier issued service bulletins (SB) 601-0583 (CL601/601-3A, -3R) and 604-76-004 (CL 604), introducing periodic inspection of the affected ETCG rack and pinion mechanisms for wear.

Subject inspection requirement tasks have now been incorporated into the applicable CL601 and CL604 Time Limits Maintenance Checks (TLMCs) through Temporary Revisions (TR), TR 5-236 (for CL601), TR 5-236 (for CL601-3A & -3R) and TR 5-2-40 (for CL604).

The required action is revising the Airworthiness Limitations Section of the Instructions for Continued Airworthiness to incorporate new repetitive functional tests of the ETCG.

### Actions and Compliance

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

(1) Within 30 days after the effective date of this AD: Revise the Airworthiness Limitations section of the Instructions for Continued Airworthiness by incorporating the applicable task in the TR listed in Table 1 of this AD.

**Table 1 – Temporary Revisions to the Airworthiness Limitations Section**

<b>For Bombardier Model –</b>	<b>Use Canadair Challenger Temporary Revision –</b>	<b>Dated –</b>	<b>To the Airworthiness Limitations Section of –</b>
CL-600-2A12 (CL-601) airplanes	5-236	July 25, 2008	Section 5-10-30 of Chapter 5 of the Canadair Challenger Time Limits/Maintenance Checks, PSP 601-5
CL-600-2B16 (CL-601-3A, and CL-601-3R) airplanes	5-236	March 22, 2007	Section 5-10-30 of Chapter 5 of the Canadair Challenger Time Limits/Maintenance Checks, PSP 601A-5
CL-600-2B16 (CL-604) airplanes	5-2-40	July 28, 2008	Section 5-10-40 of Chapter 5 of the Canadair Challenger CL-604 Time Limits/Maintenance Checks

(2) For the new TLMC tasks identified in Canadair Challenger Temporary Revision 5-236, dated July 25, 2008; Temporary Revision 5-2-40, dated July 28, 2008; and Temporary Revision 5-236, dated March 22, 2007: Initial compliance with the new TLMC tasks must be carried out in accordance with the phase-in schedule detailed in the Canadair Challenger TRs 5-236 and TR 5-2-40, as applicable, after the effective date of this AD. Thereafter, except as provided by paragraph (g)(1) of this AD, no alternative TLMC task intervals may be used.

(3) When information in a TR specified in paragraph (f)(1) has been included in the general revisions of the applicable Airworthiness Limitations section, the TR may be removed from that Airworthiness Limitations section of the Instruction for Continued Airworthiness.

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

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

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act, 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-2008-32R2, dated November 17, 2008, and the service information identified in Table 2 of this AD for related information.

**Table 2 – Referenced Service Information**

<b>Canadair Challenger Temporary Revision –</b>	<b>Dated –</b>	<b>To the Airworthiness Limitations Section of –</b>
5-236	July 25, 2008	Section 5-10-30 of Chapter 5 of the Canadair Challenger Time Limits/Maintenance Checks, PSP 601-5
5-236	March 22, 2007	Section 5-10-30 of Chapter 5 of the Canadair Challenger Time Limits/Maintenance Checks, PSP 601A-5
5-2-40	July 28, 2008	Section 5-10-40 of Chapter 5 of the Canadair Challenger CL-604 Time Limits/Maintenance Checks

## Material Incorporated by Reference

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

**Table 3 – Material Incorporated by Reference**

<b>Canadair Challenger Temporary Revision –</b>	<b>Dated –</b>	<b>To the Airworthiness Limitations Section of –</b>
5-236	July 25, 2008	Section 5-10-30 of Chapter 5 of the Canadair Challenger Time Limits/Maintenance Checks, PSP 601-5
5-236	March 22, 2007	Section 5-10-30 of Chapter 5 of the Canadair Challenger Time Limits/Maintenance Checks, PSP 601A-5
5-2-40	July 28, 2008	Section 5-10-40 of Chapter 5 of the Canadair Challenger CL-604 Time Limits/Maintenance Checks

(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; 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 November 19, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-24-19 Airbus:** Amendment 39-16113. Docket No. FAA-2009-0379; Directorate Identifier 2008-NM-220-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 8, 2010.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Airbus Model A320-111, -211, -212, -214, -231, -232, and -233 series airplanes, certificated in any category, all certified models, all serial numbers, equipped with Hamilton Sundstrand (formerly Dowty) Ram Air Turbine (RAT) Ejection Jack, Model ERPS13EJ, part number (P/N) 114160004A or 114160005, except those airplanes on which Airbus modification 27189 was done in production or Airbus Service Bulletin A320-29-1100 was done in service, and on which Airbus modification 28413 was not done in production.

**Subject**

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

**Reason**

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

An A320 operator experienced difficulties in extending the RAT during a deployment testing.

During the trouble shooting, the Ejection Jack of the RAT was removed and investigated.

The investigation identified excessive wear of the uplock segments against the inner cylinder of the Ejection Jack, due to an incorrect blend radius of the inner cylinder. This problem was determined to be caused during the previous rework of the Ejection Jack and was possibly due to the incomplete requirements contained within the Component Maintenance Manual (CMM).

This Ejection Jack failure may prevent the effective deployment and use of the RAT in emergency conditions.

This AD therefore mandates the replacement of an Ejection Jack that has been previously reworked in accordance with the incomplete CMM requirements. This will restore the reliability of the Ejection Jack of the RAT.

The implementation of this modification was originally managed by an Airbus monitoring campaign. However, the rate of installation of the corrective action by operators has not met the predicated [sic] target. As such and to ensure continued compliance with the certification requirements, it is considered necessary to require compliance by means of an AD.

## **Actions and Compliance**

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

(1) Within 12 months after the effective date of this AD, identify the serial number of the installed ejection jack of the RAT, in accordance with Accomplishment Instructions of Airbus Service Bulletin A320-29-1136, dated February 20, 2007. If the serial number is included in the affected batch identified in the service bulletin, before further flight, replace the ejection jack of the RAT with a modified or reworked ejection jack, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A320-29-1136, dated February 20, 2007.

(2) As of the effective date of this AD, no person may install a RAT Ejection Jack Model ERPS13EJ, P/N 114160004A or 114160005, on any airplane unless the ejection jack has been modified or reworked in accordance with Airbus Service Bulletin A320-29-1136, dated February 20, 2007.

## **FAA AD Differences**

Note 1: This AD differs from the MCAI and/or service information as follows: While the European Aviation Safety Agency AD 2008-0199, dated November 5, 2008, applies to Airbus Model A318, A319, and A321 series airplanes, this AD does not list these models for reasons explained in the Comments section of this AD.

## **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: Tim Dulin, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2141; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(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 2008-0199, dated November 5, 2008; and Airbus Service Bulletin A320-29-1136, dated February 20, 2007; for related information.

### **Material Incorporated by Reference**

(i) You must use Airbus Service Bulletin A320-29-1136, excluding Appendix 01, dated February 20, 2007, 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; 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 November 19, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-24-20 Bombardier, Inc. (Formerly Canadair):** Amendment 39-16114. Docket No. FAA-2009-0436; Directorate Identifier 2009-NM-005-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 8, 2010.

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to all Bombardier Model CL-600-2C10 (Regional Jet Series 700 and 701) airplanes and CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category.

**Subject**

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

**Reason**

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

Frost, snow, slush or ice on the wing leading edges and upper wing surfaces may change the stall speeds, stall characteristics and the protection provided by the stall protection system, which could result in reduced controllability of the aircraft.

Transport Canada has \* \* \* approved temporary revisions to the Aircraft Flight Manuals (AFM), which emphasize the cold weather operational requirements to ensure that the wing leading edges and upper wing surfaces are free from frost, snow, slush or ice.

The corrective action is revising the AFMs to introduce procedures for cold weather operations.

**Actions and Compliance**

- (f) Unless already done, within 14 days after the effective date of this AD, revise the Limitations—Operating Limitations section of the Bombardier (Canadair) Regional Jet Series 900 Airplane Flight Manual (AFM), CSP C-012; and the Bombardier (Canadair) Regional Jet Series 700 and 701 AFM, CSP B-012; to include the information in the Bombardier (Canadair) temporary revisions identified in Table 1 and Table 2 of this AD, as applicable. For Model CL-600-2D24

(Regional Jet Series 900) airplanes, include the information in any one of the TRs in Table 1 of this AD; for Model CL-600-2C10 (Regional Jet Series 700 and 701) airplanes, include the information in any one of the TRs in Table 2 of this AD. These TRs introduce procedures for cold weather operations to ensure that the wing leading edges and upper wing surfaces are free from frost, snow, slush, and ice. Operate the airplane according to the limitations and procedures in the applicable TRs.

Note 1: This may be done by inserting a copy of the applicable TR into the applicable AFM. When the TR has been included in general revision of the applicable AFM, the general revision may be inserted into the AFM, provided the relevant information in the general revision is identical to the applicable AFM.

**Table 1 – Temporary Revisions for Bombardier (Canadair) Regional Jet Series 900 AFM, CSP C-012**

<b>Bombardier (Canadair) TR –</b>	<b>Dated –</b>
RJ 900/48-3	August 19, 2008
RJ 900/75	November 20, 2008
RJ 900/75-1	November 20, 2008
RJ 900/75-2	April 22, 2009

**Table 2 – Temporary Revisions for Bombardier (Canadair) Regional Jet Series 700 and 701 AFM, CSP B-012**

<b>Bombardier (Canadair) TR –</b>	<b>Dated –</b>
RJ 700/87-3	August 19, 2008
RJ 700/107	November 20, 2008
RJ 700/107-1	November 20, 2008

### **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, New York Aircraft Certification Office, ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Program Manager, Continuing Operational Safety, 1600 Stewart Avenue, Suite 41, Westbury, New York 11590; telephone (516) 228-7300; fax (516) 794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics

inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

### **Related Information**

(h) Refer to MCAI Canadian Airworthiness Directive CF-2005-02 dated February 2, 2005; and the Bombardier (Canadair) TRs identified in Tables 1 and 2 of this AD; for related information.

### **Material Incorporated by Reference**

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

(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).

**Table 3 – Material Incorporated by Reference**

<b>Bombardier (Canadair) Temporary Revision –</b>	<b>Dated –</b>	<b>To the –</b>
RJ 700/87-3	August 19, 2008	Bombardier (Canadair) Regional Jet Series 700 and 701 Aircraft Flight Manual (AFM), CSP B-012
RJ 700/107	November 20, 2008	Bombardier (Canadair) Regional Jet Series 700 and 701 AFM, CSP B-012
RJ 700/107-1	November 20, 2008	Bombardier (Canadair) Regional Jet Series 700 and 701 AFM, CSP B-012
RJ 900/48-3	August 19, 2008	Bombardier (Canadair) Regional Jet Series 900 AFM, CSP C-012
RJ 900/75	November 20, 2008	Bombardier (Canadair) Regional Jet Series 900 AFM, CSP C-012
RJ 900/75-1	November 20, 2008	Bombardier (Canadair) Regional Jet Series 900 AFM, CSP C-012
RJ 900/75-2	April 22, 2009	Bombardier (Canadair) Regional Jet Series 900 AFM, CSP C-012

Issued in Renton, Washington, on November 19, 2009.  
 Stephen P. Boyd,  
 Acting Manager, Transport Airplane Directorate,  
 Aircraft Certification Service.



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**2009-24-21 McDonnell Douglas:** Amendment 39-16115. Docket No. FAA-2009-0658; Directorate Identifier 2009-NM-058-AD.

**Effective Date**

(a) This AD becomes effective January 8, 2010.

**Affected ADs**

(b) This AD supersedes AD 2005-19-08.

**Applicability**

(c) This AD applies to all McDonnell Douglas Model DC-9-14, DC-9-15, and DC-9-15F airplanes; Model DC-9-21 airplanes; Model DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B) airplanes; Model DC-9-41 airplanes; and Model DC-9-51 airplanes; certificated in any category.

**Subject**

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

**Unsafe Condition**

(e) This AD results from two reports of a collapsed main landing gear (MLG) and a report of cracks in two MLG cylinders. We are issuing this AD to detect and correct fatigue cracks in the shock strut cylinder of the MLG, which could result in a collapsed MLG during takeoff or landing, and possible reduced structural integrity of the airplane.

**Compliance**

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

**Restatement of Requirements of AD 2005-19-08, With Revised Service Information**

**Records Review**

(g) Except as required by paragraph (m) of this AD, before the applicable compliance time specified in paragraph (h) or Table 1 of this AD, as applicable, do the applicable actions in paragraphs (g)(1) and (g)(2) of this AD.

(1) For all airplane groups: Review the airplane maintenance records of the MLG to determine its service history and the number of landings on the MLG shock strut cylinder.

(2) For Group 3 airplanes identified in the service bulletin: Review the maintenance records to determine if the MLG cylinder on each Group 3 airplane has always been on a Group 3 airplane, and do the actions in paragraph (k) of this AD.

### Inspection

(h) Inspect the MLG shock strut cylinders for cracks using the Option 1 or Option 2 non-destructive testing inspection described in Boeing Alert Service Bulletin DC9-32A350, Revision 1, dated August 3, 2005; or Revision 2, dated March 20, 2009; except as required by paragraph (m) of this AD. Inspect in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC9-32A350, Revision 1, dated August 3, 2005; or Revision 2, dated March 20, 2009; except as required by paragraph (m) of this AD. After the effective date of this AD, use only Boeing Alert Service Bulletin DC9-32A350, Revision 2, dated March 20, 2009. Do the detailed inspection before the accumulation of 60,000 total landings on the MLG, or at the applicable grace period specified in Table 1 of this AD, whichever occurs later, except as required by paragraph (m) of this AD, and except as provided by paragraph (k) of this AD. If the review of maintenance records is not sufficient to conclusively determine the service history and number of landings on the MLG shock strut cylinder, perform the initial inspection at the applicable grace period specified in Table 1 of this AD.

**Table 1 – Threshold and Repetitive Interval**

<b>Airplanes Identified in the Service Bulletin as Group</b>	<b>Threshold</b>	<b>Repetitive Interval</b>
1	Within 18 months or 650 landings after October 21, 2005 (the effective date of AD 2005-19-08), whichever occurs first	Intervals not to exceed 650 landings.
2	Within 18 months or 500 landings after October 21, 2005, whichever occurs first	Intervals not to exceed 500 landings.
3, except as provided by paragraph (k) of this AD.	Within 18 months or 2,500 landings after October 21, 2005, whichever occurs first	Intervals not to exceed 2,500 landings.
4	Within 18 months or 2,100 landings after October 21, 2005, whichever occurs first	Intervals not to exceed 2,100 landings.

### No Indication of Cracking Is Found

(i) If no indication of cracking is found during the inspection required by paragraph (h) of this AD, repeat the inspection in accordance with Boeing Alert Service Bulletin DC9-32A350, Revision 1, dated August 3, 2005; or Boeing Alert Service Bulletin DC9-32A350, Revision 2, dated March 20, 2009; at the applicable interval specified in Table 1 of this AD, except as required by paragraph (m) of this AD. After the effective date of this AD, use only Boeing Alert Service Bulletin DC9-32A350, Revision 2, dated March 20, 2009.

## **Related Investigative and Corrective Actions**

(j) If any indication of cracking is found during any inspection required by paragraph (h) or (i) of this AD: Before further flight, confirm the indication of cracking by doing all applicable related investigative actions and doing the applicable corrective actions in accordance with Boeing Alert Service Bulletin DC9-32A350, Revision 1, dated August 3, 2005; or Revision 2, dated March 20, 2009; except as required by paragraph (m) of this AD. After the effective date of this AD, use only Boeing Alert Service Bulletin DC9-32A350, Revision 2, dated March 20, 2009. Repeat the inspection at the applicable threshold and interval specified in paragraph (h) of this AD.

## **MLG Cylinder Previously Installed on Group 4 Airplanes**

(k) For MLG cylinders on Group 3 airplanes as identified in Boeing Alert Service Bulletin DC9-32A350, Revision 1, dated August 3, 2005; or Revision 2, dated March 20, 2009: If the MLG cylinder was previously installed on a Group 4 airplane, as identified in Boeing Alert Service Bulletin DC9-32A350, Revision 1, dated August 3, 2005; or Revision 2, dated March 20, 2009; or if the service history and number of landings cannot be determined, the MLG cylinder must be inspected at the grace period and repetitive interval that applies to Group 4 airplanes, as specified in Table 1 of this AD, except as required by paragraph (m) of this AD.

## **Actions Accomplished in Accordance With Original Issue of Service Bulletin**

(l) For airplanes with shock struts that have part numbers other than 5924400-505 and 5924400-506: Actions done before the effective date of this AD in accordance with Boeing Alert Service Bulletin DC9-32A350, dated December 3, 2004, are acceptable for compliance with the corresponding actions required by paragraphs (h), (i), (j), and (k) of this AD.

## **New Requirements of This AD**

(m) For airplanes with shock struts that have part numbers 5924400-505 and 5924400-506: Do the actions required by paragraphs (g), (h), (i), (j), and (k), as applicable, in accordance with Boeing Alert Service Bulletin DC9-32A350, Revision 2, dated March 20, 2009. Do the actions at the time specified in those paragraphs, except where Table 1 of this AD specifies a compliance time after October 21, 2005, the compliance time for these airplanes is within the specified compliance time after the effective date of this AD.

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

(n)(1) The Manager, Los Angeles Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Wahib Mina, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5324; fax (562) 627-5210.

(2) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector

(PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

(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, Los Angeles ACO, to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

### **Material Incorporated by Reference**

(o) You must use Boeing Alert Service Bulletin DC9-32A350, Revision 2, dated March 20, 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 Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail [dse.boecom@boeing.com](mailto:dse.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 November 19, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-24-22 Learjet Inc. (Formerly Gates Learjet Corporation):** Amendment 39-16116. Docket No. FAA-2009-0719; Directorate Identifier 2009-NM-078-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Learjet Inc. Model 45 airplanes, certificated in any category, serial numbers 45-005 through 45-321 inclusive, 45-323 through 45-332 inclusive, and 45-2001 through 45-2075 inclusive.

**Subject**

(d) Air Transport Association (ATA) of America Code 52: Doors, and ATA Code 25: Equipment/Furnishings.

**Unsafe Condition**

(e) This AD results from reports of incorrect external baggage door seal material and door seal sealant, as well as incorrect sealant on interior baggage panels used during manufacture of the airplane. The Federal Aviation Administration is issuing this AD to prevent the use of door seals and sealant that do not meet flammability requirements, which could result in an uncontrollable and undetected fire within the baggage compartment.

**Compliance**

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

**Inspection of Red Room Temperature Vulcanizing (RTV) Sealant in Aft Baggage Bay**

(g) For airplanes having serial numbers 45-005 through 45-314 inclusive and 45-2001 through 45-2065 inclusive: Within 300 flight hours after the effective date of this AD, do a general visual inspection of the outer surfaces of the fiberglass doublers for the presence of red RTV sealant, in accordance with the Accomplishment Instructions in Bombardier Service Bulletin 45-25-21, Revision

1, dated January 19, 2009; or 40-25-11, Revision 1, dated January 19, 2009; as applicable. If any red RTV sealant is found, before further flight, replace the sealant, in accordance with the Accomplishment Instructions in Bombardier Service Bulletin 45-25-21, Revision 1, dated January 19, 2009; or 40-25-11, Revision 1, dated January 19, 2009; as applicable.

Note 1: For the purposes of this AD, a general visual inspection is: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to ensure visual access to all surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

### **Inspection of Baggage Bay Door Fire Barrier Seal**

(h) For all airplanes: Within 300 flight hours after the effective date of this AD, do a general visual inspection of the baggage bay door fire barrier seal for the presence of metal inconel mesh in the material, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions in Bombardier Service Bulletin 45-52-16, Revision 1, dated July 21, 2008; or 40-52-07, Revision 1, dated July 21, 2008; as applicable. Do all applicable related investigative and corrective actions before further flight in accordance with the Accomplishment Instructions in Bombardier Service Bulletin 45-52-16, Revision 1, dated July 21, 2008; or 40-52-07, Revision 1, dated July 21, 2008; as applicable.

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

(i)(1) 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: William Griffith, Aerospace Engineer, Airframe Branch, ACE-118W, FAA, Wichita ACO, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4116; fax (316) 946-4107.

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

### **Material Incorporated by Reference**

(j) You must use the service information contained in Table 1 of this AD to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Learjet, Inc., One Learjet Way, Wichita, Kansas 67209-2942; telephone 316-946-2000; fax 316-946-2220; e-mail [ac.ict@aero.bombardier.com](mailto:ac.ict@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).

**Table 1 – Material Incorporated by Reference**

<b>Service Bulletin</b>	<b>Revision</b>	<b>Date</b>
Bombardier Service Bulletin 40-25-11	1	January 19, 2009
Bombardier Service Bulletin 45-25-21	1	January 19, 2009
Bombardier Service Bulletin 40-52-07	1	July 21, 2008
Bombardier Service Bulletin 45-52-16	1	July 21, 2008

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

Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2009-25-05 Bombardier, Inc. (Formerly de Havilland, Inc.):** Amendment 39-16124. Docket No. FAA-2009-0784; Directorate Identifier 2009-NM-109-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 8, 2010.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Bombardier Model DHC-8-400, DHC-8-401, and DHC-8-402 series airplanes, certificated in any category, serial numbers 4001 through 4237 inclusive.

**Subject**

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

**Reason**

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

“Several operators have reported cases of inadvertent single spoiler deployment during flight on the DHC-8 Series 400 aircraft. Investigation has revealed that the probable cause for this deployment is internal contamination of the Lift/Dump (L/D) valve and moisture ingress into the L/D valve armature.

“This condition, if not corrected, could cause uncommanded deployment of the spoilers resulting in increased drag and in combination with a loss of aileron, could result in a significant reduction in aircraft roll control.”

Corrective actions include incorporating a modification to add a filter/restrictor fitting to the spoiler lift dump valve, which includes upgrading, testing, and re-identifying the valve after replacing the pressure port inlet fitting.

**Actions and Compliance**

(f) Unless already done, within 5,000 flight hours after the effective date of this AD, incorporate Bombardier Modsum 4-113554 to add a filter/restrictor fitting to the spoiler lift dump valve, in accordance with Bombardier Service Bulletin 84-27-43, dated January 29, 2009.

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

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

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 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 Canadian Airworthiness Directive CF-2009-26, dated May 21, 2009; and Bombardier Service Bulletin 84-27-43, dated January 29, 2009; for related information.

## **Material Incorporated by Reference**

(i) You must use Bombardier Service Bulletin 84-27-43, dated January 29, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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 November 23, 2009.  
Ali Bahrami,  
Manager, Transport Airplane Directorate, Aircraft Certification Service.  
[FR Doc. E9-28798 Filed 12-3-09; 8:45 am]



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**2009-25-06 Airbus:** Amendment 39-16125. Docket No. FAA-2009-0055; Directorate Identifier 2008-NM-194-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective January 8, 2010.

**Affected ADs**

- (b) This AD supersedes AD 2007-18-02, Amendment 39-15182.

**Applicability**

(c) This AD applies to Airbus Model A300 B2-1C, A300 B2-203, A300 B2K-3C, A300 B4-103, A300 B4-203, and A300 B4-2C airplanes, certificated in any category, as identified in Airbus Mandatory Service Bulletin A300-24-0103, Revision 03, dated February 18, 2009.

**Subject**

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

**Reason**

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

Further to the accident of a Boeing 747-131 (flight TWA800), the FAA has published SFAR 88 (Special Federal Aviation Regulation 88). Subsequently, the Joint Aviation Authorities (JAA) recommended the application of a similar regulation to the National Aviation Authorities (NAA) of its member countries. Under this regulation, all holders of type certificates for passenger transport aeroplane with either a passenger capacity of 30 or more, or a payload capacity of 3 402 kg (7,500 lbs) or more which have received their certification after 01 January 1958, are required to conduct a design review against explosion risks.

One of the consequences of the Airbus design review is the modification of the fuel pump wiring to provide protection against chafing of the fuel pump cables. This condition, if not corrected, could generate short circuits leading to fuel pump failure and arcing. These could become a potential ignition source inside the fuel tank which, in combination with flammable fuel vapours (if present), could result in a fuel tank explosion and consequent loss of the aeroplane.

To address this unsafe condition, EASA [European Aviation Safety Agency] issued AD 2007-0066 that required this modification in accordance with Airbus Service Bulletin (SB) A300-24-0103 Revision 01. Airbus subsequently introduced an additional modification of the electrical wiring of the outer fuel pump and the landing lights of the left (LH) and the right (RH) side in Revision 02 of the

SB A300-24-0103, leading to the issuance of EASA AD 2008-0188 which superseded EASA AD 2007-0066 and required the additional work.

More recently, Airbus introduced some additional protection to routes 1P and 2P harnesses in zone 571 and 671 of the aeroplane.

For the reason described above, this new AD retains the requirements of EASA AD 2008-0188, which is superseded, and requires the additional work as specified in Revision 03 of Airbus SB A300-24-0103.

The additional modification will provide additional protection from chafing and will prevent intermittent operation of the fuel pump and landing lights, as well as failure of the power supply. The modification of the wiring of the outer fuel pump and the landing light on the LH side route 1P harness and RH side route 2P harness includes additional mechanical protection that includes procedures for installing new splicing on the wires, a new cable type, shrink sleeve installation on the new wiring, and an additional braided conduit sleeve (Halar), as applicable, for the fuel pumps and the landing lights.

### **Restatement of Requirements of AD 2007-18-02, With Revised Service Information**

(f) Within 31 months after October 2, 2007 (the effective date of AD 2007-18-02), unless already done, modify the inner and outer fuel pump wiring, route 1P and 2P harnesses in the LH (left-hand) wing and in the RH (right-hand) wing, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A300-24-0103, Revision 01, dated January 11, 2007; or Airbus Mandatory Service Bulletin A300-24-0103, Revision 03, dated February 18, 2009. After the effective date of this AD, use only Airbus Mandatory Service Bulletin A300-24-0103, Revision 03, dated February 18, 2009. Actions done before October 2, 2007, in accordance with Airbus Service Bulletin A300-24-0103, dated March 15, 2006, for airplanes under configuration 1 as defined in Airbus Service Bulletin A300-24-0103, Revision 01, dated January 11, 2007; Revision 02, dated April 4, 2008; or Revision 03, dated February 18, 2009; are acceptable for compliance with the requirements of this paragraph.

### **New Requirements of This AD**

#### **Actions and Compliance**

(g) Unless already done, within 12 months after the effective date of this AD, modify the wiring of the outer fuel pump and the landing light on the LH side route 1P harness and RH side route 2P harness in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-24-0103, Revision 03, dated February 18, 2009.

#### **FAA AD Differences**

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

#### **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if

requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO. AMOCs approved previously in accordance with AD 2007-18-02, are approved as AMOCs for the corresponding provisions of 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**

(i) Refer to MCAI EASA Airworthiness Directive 2009-0157, dated July 17, 2009; Airbus Service Bulletin A300-24-0103, Revision 01, dated January 11, 2007; and Airbus Mandatory Service Bulletin A300-24-0103, Revision 03, dated February 18, 2009; for related information.

### **Material Incorporated by Reference**

(j) You must use Airbus Mandatory Service Bulletin A300-24-0103, Revision 03, dated February 18, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Airbus SAS–EAW (Airworthiness Office), 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 44 51; e-mail: [account.airworth-eas@airbus.com](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 November 23, 2009.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

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