



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2009-19**

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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



**2009-02-06 R1 Boeing:** Amendment 39-16015. Docket No. FAA-2009-0787; Directorate Identifier 2009-NM-090-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective September 23, 2009.

**Affected ADs**

(b) This AD revises AD 2009-02-06.

**Applicability**

(c) This AD applies to Boeing Model 737-300, -400, and -500 series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 737-53A1279, dated December 18, 2007.

**Subject**

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

**Unsafe Condition**

(e) This AD results from reports of cracking in the frame, or in the frame and frame reinforcement, common to the 1.04-inch nominal diameter wire penetration hole intended for wire routing. We are issuing this AD to detect and correct cracking in the fuselage frames and frame reinforcements, which could reduce the structural capability of the frames to sustain limit loads, and result in cracking in the fuselage skin and subsequent rapid depressurization 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 2009-02-06 With Clarifications of Compliance Requirements**

**Service Bulletin Reference Paragraph**

(g) The term "service bulletin," as used in this AD, means Boeing Alert Service Bulletin 737-53A1279, dated December 18, 2007.

(1) Where the service bulletin 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.

(2) The "Condition" column of paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 737-53A1279, dated December 18, 2007, refers to total flight cycles "at the date given on this service bulletin." However, this AD applies to the airplanes with the specified total flight cycles as of April 15, 2009 (the effective date of AD 2009-02-06).

(3) Where the service bulletin specifies to contact Boeing for instructions for removing damage and repairing cracking: Before further flight, remove the damage or repair the cracking using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(4) Although the service bulletin referenced in this AD specifies to submit information to the manufacturer, this AD does not include that requirement.

### **Inspections, Related Investigative Actions, and Corrective Actions**

(h) At the applicable time specified in paragraph 1.E., "Compliance," of the service bulletin, except as specified by paragraph (g)(1) of this AD: Do a high frequency eddy current (HFEC) surface inspection or an HFEC hole/edge inspection for cracking of the 1.04-inch nominal diameter wire penetration hole in the frame and frame reinforcement, between stringer S-20 and S-21; and do all applicable related investigative and corrective actions by accomplishing all the actions specified in the Accomplishment Instructions of the service bulletin, except as specified by paragraphs (g)(3) and (g)(4) of this AD. Do all applicable related investigative and corrective actions before further flight. Thereafter, repeat the inspections at the applicable intervals specified in paragraph 1.E., "Compliance," of the service bulletin.

### **Terminating Action**

(i) Doing the repair in Part 3 or the preventative modification in Part 5 of the Accomplishment Instructions of the service bulletin terminates the repetitive inspection requirements 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: Wayne Lockett, Aerospace Engineer, Airframe Branch, ANM-120S, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6447; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

## **Material Incorporated by Reference**

(k) You must use Boeing Alert Service Bulletin 737-53A1279, dated December 18, 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 Alert Service Bulletin 737-53A1279, dated December 18, 2007, on April 15, 2009 (74 FR 10469, March 11, 2009).

(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 August 26, 2009.

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



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**CORRECTION:** [*Federal Register: September 2, 2009 (Volume 74, Number 169)*]; Page 45311;  
[www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)]

**2009-15-19 BAE Systems (Operations) Limited (Formerly British Aerospace Regional Aircraft):** Amendment 39-15982. Docket No. FAA-2009-0432; Directorate Identifier 2008-NM-168-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to BAE Systems (Operations) Limited Model BAe 146-100A and 146-200A series airplanes, certificated in any category, as identified in BAE Systems (Operations) Limited Inspection Service Bulletin ISB.55-020, dated December 11, 2007.

**Subject**

- (d) Air Transport Association (ATA) of America Code 55: Stabilizers.

**Reason**

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

BAE Systems (Operations) Ltd has determined that in order to assure the continued structural integrity of the horizontal stabilizer lower skin and joint plates in the rib 1 area of certain BAe 146 aircraft, a revised inspection programme for this area is considered necessary. The disbonding of joints can lead to corrosion, which, if undetected, could result in degradation of the structural integrity of the horizontal stabilizer.

For the reasons described above, this EASA AD requires the implementation of repetitive inspections and corrective actions, depending on findings. It also provides an approved repair as optional terminating action for the repetitive inspections.

The repetitive inspections for damage of the left and right side of the horizontal stabilizer lower skin and joint plates include a detailed visual inspection for damage (including distortion, loose or distorted fasteners, and corrosion) of the horizontal stabilizer lower skin, a borescopic inspection for damage (including staining, debris around the stringer and joint plate edges, cracked or broken

stringers, and distortion or corrosion in rivet holes) of the internal structure of the horizontal stabilizer, and a low frequency eddy current inspection for damage (including corrosion) of the horizontal stabilizer lower skin. For airplanes on which no damage is found, the required actions include drilling and reaming four holes and doing a detailed visual inspection of the holes for distortion and corrosion. Corrective actions include installing rivets, and contacting BAE Systems (Operations) Limited for repair instructions and doing the repair. Doing a repair of the horizontal stabilizer (which consists of partially replacing the lower skin from the center line to inboard of rib 3) ends the repetitive inspections.

## **Actions and Compliance**

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

(1) Within 6 months after the effective date of this AD, inspect for damage of the horizontal stabilizer lower skin and joint plates, in accordance with paragraphs 2.C.(1) through 2.C.(3) of BAE Systems (Operations) Limited Inspection Service Bulletin ISB.55-020, dated December 11, 2007 (the "service bulletin"); and, if no damage is found, drill and ream four holes in accordance with paragraph 2.C.(4)(a) of the service bulletin, and do a detailed visual inspection of the holes for distortion and corrosion, in accordance with paragraph 2.C.(4)(b) of the service bulletin.

(i) If any distortion or corrosion is found in any rivet hole, before further flight, contact BAE Systems (Operations) Limited for approved repair instructions and do the repair prior to the fitment of the rivets.

(ii) If no distortion and no corrosion is found, before further flight, install the four rivets in accordance with paragraph 2.C.(4)(c) of the service bulletin.

(2) Repeat the inspection for damage of the horizontal stabilizer lower skin and joint plates required by paragraph (f)(1) of this AD thereafter at intervals not to exceed 24 months.

(3) If damage is found during any inspection required by paragraph (f)(1) or (f)(2) of this AD, before further flight, contact BAE Systems (Operations) Limited in accordance with paragraph 2.C.(5) of the service bulletin, and accomplish an approved repair in accordance with paragraph 2.C.(6) of the service bulletin.

(4) Doing the repair of the horizontal stabilizer in accordance with BAE Systems (Operations) Limited Repair Instruction Leaflet (RIL) HC551H9061, Issue 3, dated January 31, 2008, on the left and right sides of the horizontal stabilizer, terminates the repetitive inspections required by paragraph (f)(2) of this AD.

(5) Actions accomplished before the effective date of this AD according to BAE Systems (Operations) Limited RIL HC551H9061, Issue 2, dated November 16, 2007, are considered acceptable for compliance with the corresponding action specified in this AD.

## **FAA AD Differences**

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

## **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Todd Thompson,

Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

(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 (EASA) Airworthiness Directive 2008-0167, dated September 2, 2008; BAE Systems (Operations) Limited Inspection Service Bulletin ISB.55-020, dated December 11, 2007; and BAE Systems (Operations) Limited Repair Instruction Leaflet HC551H9061, Issue 3, dated January 31, 2008; for related information.

### **Material Incorporated by Reference**

(i) You must use BAE Systems (Operations) Limited Inspection Service Bulletin ISB.55-020, dated December 11, 2007, to do the actions required by this AD, unless the AD specifies otherwise. If you do the repair option provided in paragraph (f)(4) of this AD, you must use BAE Systems (Operations) Limited Repair Instruction Leaflet HC551H9061, Issue 3, dated January 31, 2008, unless the AD specifies otherwise. (The issue date, January 31, 2008, of BAE Systems (Operations) Limited Repair Instruction Leaflet HC551H9061, Issue 3, is specified only on the first page of the document.)

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

(2) For service information identified in this AD, contact BAE Systems Regional Aircraft, 13850 McLearen Road, Herndon, Virginia 20171; telephone 703-736-1080; e-mail [raebusiness@baesystems.com](mailto:raebusiness@baesystems.com); Internet <http://www.baesystems.com/Businesses/RegionalAircraft/index.htm>.

(3) You may review copies of the service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington. For information on the availability of this material at the FAA, call 425-227-1221 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 July 13, 2009.

Ali Bahrami,

Manager, Transport Airplane Directorate, Aircraft Certification Service.

[FR Doc. E9-17542 Filed 7-28-09; 8:45 am]



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**2009-18-08 Airbus:** Amendment 39-16004. Docket No. FAA-2009-0781; Directorate Identifier 2009-NM-111-AD.

**Effective Date**

- (a) This AD becomes effective September 8, 2009.

**Affected ADs**

- (b) This AD affects AD 2004-03-33, Amendment 39-13477.

**Applicability**

(c) This AD applies to the airplanes identified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category, equipped with Thales Avionics pitot probes having part number (P/N) C16195AA or C16195BA.

(1) Airbus Model A330-201, A330-202, A330-203, A330-223, A330-243, A330-301, A330-302, A330-303, A330-321, A330-322, A330-323, A330-341, A330-342, and A330-343 series airplanes.

(2) Airbus Model A340-211, A340-212, A340-213, A340-311, A340-312, and A340-313 series airplanes.

(3) Airbus Model A340-541 and A340-642 airplanes.

**Subject**

- (d) Air Transport Association (ATA) of America Code 34: Navigation.

**Unsafe Condition**

(e) This AD results from reports of airspeed indication discrepancies while flying at high altitudes in inclement weather conditions. We are issuing this AD to prevent airspeed discrepancies, which could lead to disconnection of the autopilot and/or auto-thrust functions, and reversion to flight control alternate law and consequent increased pilot workload. Depending on the prevailing airplane altitude and weather, this condition, if not corrected, could result in reduced control 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.

## Replacement

(g) Within 120 days after the effective date of this AD, accomplish the applicable replacements required by paragraphs (g)(1) and (g)(2) of this AD.

(1) For airplanes equipped with Thales Avionics pitot probes, P/N C16195AA, in position 2 (first officer): Replace the P/N C16195AA pitot probe with a Thales Avionics pitot probe having P/N C16195BA, in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 1 of this AD.

**Table 1 – Service bulletins for replacements specified in paragraph (g)(1) of this AD**

<b>For Model –</b>	<b>Use Airbus Service Bulletin –</b>	<b>Revision –</b>	<b>Dated –</b>
A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes	A330-34-3206	01	November 12, 2008
A340-211, -212, -213, -311, -312, and -313 series airplanes	A340-34-4200	01	November 12, 2008
A340-541 and -642 airplanes	A340-34-5068	Original	December 1, 2008

(2) For airplanes equipped with Thales Avionics pitot probes, P/N C16195AA or P/N C16195BA, in position 1 (captain) or 3 (standby): Replace P/N C16195AA and P/N C16195BA pitot probes with Goodrich pitot probes having P/N 0851HL, in accordance with the Accomplishment Instructions of the applicable service bulletin listed in Table 2 of this AD.

**Table 2 –Service bulletins for replacements specified in paragraph (g)(2) of this AD**

<b>For Model –</b>	<b>Use Airbus Mandatory Service Bulletin –</b>	<b>Revision –</b>	<b>Dated –</b>
A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes	A330-34-3231	Original	August 12, 2009
A340-211, -212, -213, -311, -312, and -313 series airplanes	A340-34-4238	Original	August 12, 2009
A340-541 and -642 airplanes	A340-34-5071	Original	August 12, 2009

## Optional Replacement

(h) Installing Goodrich pitot probes having P/N 0851HL in position 2 (first officer), in accordance with a method approved by either the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA) (or its delegated agent); is acceptable for compliance with the requirements of paragraph (g)(1) of this AD.

## **Credit for Actions Done in Accordance With Previous Issues of Service Bulletins**

(i) Accomplishing the replacement required by paragraph (g)(1) of this AD before the effective date of this AD, in accordance with Airbus Service Bulletin A330-34-3206, dated September 14, 2007; or Airbus Service Bulletin A340-34-4200, dated September 14, 2007; as applicable, is acceptable for compliance with the corresponding action required by paragraph (g)(1) of this AD.

### **Related AD 2004-03-33**

(j) Doing the applicable replacements required by this AD terminates the replacements required by paragraphs (g)(2) and (h)(2) of AD 2004-03-33.

(k) Doing the applicable replacements required by this AD is acceptable for compliance with the replacements required by paragraphs (g)(1) and (h)(1) of AD 2004-03-33.

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

(l) 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.

### **Related Information**

(m) None.

### **Material Incorporated by Reference**

(n) 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 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).

**Table 3 – Material incorporated by reference**

<b>Service Bulletin</b>	<b>Revision</b>	<b>Date</b>
Airbus Mandatory Service Bulletin A330-34-3231	Original	August 12, 2009
Airbus Mandatory Service Bulletin A340-34-4238	Original	August 12, 2009
Airbus Mandatory Service Bulletin A340-34-5071	Original	August 12, 2009
Airbus Service Bulletin A330-34-3206	01	November 12, 2008
Airbus Service Bulletin A340-34-4200	01	November 12, 2008
Airbus Service Bulletin A340-34-5068	Original	December 1, 2008

Issued in Renton, Washington, on August 24, 2009.

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



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**2009-18-09 Fokker Services B.V.:** Amendment 39-16005. Docket No. FAA-2009-0563; Directorate Identifier 2008-NM-180-AD.

**Effective Date**

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

**Affected ADs**

(b) This AD supersedes AD 99-20-01, Amendment 39-11329.

**Applicability**

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

(1) Fokker Model F.28 Mark 0100 airplanes, all serial numbers.

(2) Fokker Model F.28 Mark 0070 airplanes, serial numbers 11521, 11528 through 11537 inclusive, 11545, 11547, 11553, 11557, 11561, 11562, 11566, 11567, 11571, 11572, 11576 through 11579 inclusive, and 11581 through 11583 inclusive. All airplanes with these serial numbers are fitted with center wing fuel tanks.

**Subject**

(d) Air Transport Association (ATA) of America Codes 31 and 78: Instruments and Engine Exhaust, respectively.

**Reason**

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

A recent design review has been carried out on the F28 Mark 0070/0100 fuel system in accordance with the guidelines related to FAA SFAR 88 [Special Federal Aviation Regulation No. 88] (Fuel Tank Safety Program) and JAA [Joint Aviation Authorities] INT/POL/25/12. The review revealed that under certain failure conditions, prolonged dry running of the fuel transfer pumps may result in an ignition source in the centre wing fuel tank. This condition, if not corrected, could lead to ignition of flammable fuel vapors, resulting in fuel tank explosion and consequent loss of the aircraft.

To address and correct this unsafe condition, new software (version V13.55) has been developed for the Flight Warning Computer (FWC). This software update introduces a decreased time delay of the centre wing fuel tank low pressure alert from 15 minutes to 60 seconds, to stop prolonged dry running of the fuel transfer pumps.

For the reasons described above, this EASA Airworthiness Directive (AD) requires the replacement of the FWC with a modified unit, incorporating software version V13.55.

The corrective actions include revising the airplane flight manual (AFM) to change certain indications and warnings; installing new software for the multifunction display unit (MFDU); and installing a new resistor in the thrust reverser indicator and control system, or an improved thrust reverser unlock indication relay.

### **Restatement of Requirements of AD 99-20-01 With No Changes to the Modifications**

(f) Unless already done, within 18 months after October 27, 1999 (the effective date of AD 99-20-01), modify the electrical wiring of the FWC in accordance with Part 1 or 2, as applicable, of the Accomplishment Instructions of Fokker Service Bulletin SBF100-31-047, Revision 1, dated March 21, 1997.

Note 1: It is not necessary to install computer software version V10.40 into the FWC, since a later version is available and is required to be installed by AD 99-20-01.

(g) Unless already done, concurrently with the accomplishment of the requirements of paragraph (f) of this AD, install upgraded computer software version V11.45 into the FWC in accordance with Fokker Service Bulletin SBF100-31-051, dated August 15, 1998.

Note 2: AlliedSignal Grimes Aerospace has issued Service Bulletin 80-0610-31-0031, dated May 14, 1998, as an additional source of guidance for installation of the upgraded computer software version into the FWC.

Note 3: Operators should note that Fokker Service Bulletin SBF100-31-051, dated August 15, 1998, specifies prior or concurrent accomplishment of Fokker Service Bulletin SBF100-78-014 (which specifies concurrent accomplishment of Fokker Component Service Bulletin (CSB) P41440-78-04, and prior or concurrent accomplishment of Fokker Service Bulletin SBF100-78-012 and CSB P41440-78-05). Related FAA AD 99-20-02, amendment 39-11330, requires accomplishment of these four other service bulletins.

### **New Requirements of This AD: Actions and Compliance**

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

(1) Within 36 months after the effective date of this AD, replace FWC units having part number (P/N) 80-0610-3-45 and P/N 80-0610-3-50 with modified units having P/N 80-0610-3-55, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-31-067, Revision 1, dated April 24, 2008.

(2) Within 36 months after the effective date of this AD and concurrently with the accomplishment of paragraph (h)(1) of this AD, revise the Emergency and Abnormal Procedures sections of the airplane flight manual (AFM), as specified in Fokker Manual Change Notification-Operational Documentation MCNO-F100-050, dated January 31, 2008, which is included in Fokker Service Bulletin SBF100-31-067, Revision 1, dated April 24, 2008. These AFM sections provide alterations, which are introduced in Fokker Service Bulletin SBF100-31-067, Revision 1, dated April 24, 2008.

Note 4: Revisions to the Emergency Procedures and Abnormal Procedures sections of the AFM, as specified in Fokker MCNO-F100-050, dated January 31, 2008, may be done by inserting copies of Fokker MCNO-F100-050, dated January 31, 2008, into the AFM. When the information in Fokker MCNO-F100-050, dated January 31, 2008, has been included in general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revisions are identical to that in Fokker MCNO-F100-050, dated January 31, 2008.

(3) After accomplishing paragraph (h)(1) of this AD, no person may install an FWC having P/N 80-0610-3-45 or P/N 80-0610-3-50, unless it has been modified to P/N 80-0610-3-55 standard in accordance with Honeywell Service Bulletin 80-0610-31-0003, dated February 13, 2008.

(4) Within 36 months after the effective date of this AD, install software version V12 for the MFDU in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-31-060, dated June 1, 2002.

(5) Within 36 months after the effective date of this AD, modify the thrust reverser indication and control system in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-78-016, dated October 1, 1999; or modify the thrust reverser unlock indication relay in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-78-017, dated December 1, 1999.

### **FAA AD Differences**

Note 5: This AD differs from the MCAI and/or service information as follows:

(1) Replacing the MFDU in accordance with Fokker Service Bulletin SBF100-31-060, dated June 1, 2002, is not included in the MCAI; however, this AD includes that action. It is necessary to install a new version of the MFDU software before installing the new version of the FWC software.

(2) Modifying the thrust reverser indication and control system in accordance with Fokker Service Bulletin SBF100-78-016, dated October 1, 1999; or modifying the thrust reverser unlock indication relay in accordance with Fokker Service Bulletin SBF100-78-017, dated December 1, 1999, is not included in the MCAI; however, this AD includes those actions. It is necessary to do one of those actions before installing the MFDU software.

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

(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

(j) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2008-0090, dated May 13, 2008, and the service information identified in Table 1 of this AD, for related information.

**Table 1 – Related Information**

<b>Service Information -</b>	<b>Revision level -</b>	<b>Dated -</b>
Fokker Service Bulletin SBF100-31-047	1	March 21, 1997
Fokker Service Bulletin SBF100-31-051	Original	August 15, 1998
Fokker Service Bulletin SBF100-31-060	Original	June 1, 2002
Fokker Service Bulletin SBF100-31-067, including Fokker Manual Change Notification-Operational Documentation MCNO-F100-50, dated January 31, 2008	1	April 24, 2008
Fokker Service Bulletin SBF100-78-016	Original	October 1, 1999
Fokker Service Bulletin SBF100-78-017	Original	December 1, 1999

### Material Incorporated by Reference

(k) 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 – All Material Incorporated by Reference**

<b>Document</b>	<b>Revision</b>	<b>Date</b>
Fokker Service Bulletin SBF100-31-047	1	March 21, 1997
Fokker Service Bulletin SBF100-31-051	Original	August 15, 1998
Fokker Service Bulletin SBF100-31-060	Original	June 1, 2002
Fokker Service Bulletin SBF100-31-067, including Fokker Manual Change Notification-Operational Documentation MCNO-F100-50, dated January 31, 2008	1	April 24, 2008
Fokker Service Bulletin SBF100-78-016	Original	October 1, 1999
Fokker Service Bulletin SBF100-78-017	Original	December 1, 1999

(1) The Director of the Federal Register approved the incorporation by reference of the service information contained in Table 3 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

**Table 3 – New Material Incorporated by Reference**

<b>Document</b>	<b>Revision</b>	<b>Date</b>
Fokker Service Bulletin SBF100-31-060	Original	June 1, 2002
Fokker Service Bulletin SBF100-31-067, including Fokker Manual Change Notification-Operational Documentation MCNO-F100-50, dated January 31, 2008	1	April 24, 2008
Fokker Service Bulletin SBF100-78-016	Original	October 1, 1999
Fokker Service Bulletin SBF100-78-017	Original	December 1, 1999

(2) The Director of the Federal Register previously approved the incorporation by reference of Fokker Service Bulletin SBF100-31-047, Revision 1, dated March 21, 1997; and Fokker Service Bulletin SBF100-31-051, dated August 15, 1998; on October 27, 1999 (64 FR 51202, September 22, 1999).

(3) For Fokker 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>.

(4) For AlliedSignal Grimes Aerospace and Honeywell service information identified in this AD, contact Honeywell Aerospace, Technical Publications and Distribution, M/S 2101-201, P.O. Box 52170, Phoenix, Arizona 85072-2170; telephone 602-365-5535; fax 602-365-5577; Internet <http://www.honeywell.com>.

(5) 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.

(6) 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 August 18, 2009.

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



**2009-18-10 Boeing:** Amendment 39-16006. Docket No. FAA-2009-0476; Directorate Identifier 2008-NM-188-AD.

**Effective Date**

- (a) This AD becomes effective October 14, 2009.

**Affected ADs**

- (b) This AD supersedes AD 2008-17-10, amendment 39-15648.

**Applicability**

(c) This AD applies to Boeing Model 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 series airplanes; certificated in any category; as identified in Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008.

**Subject**

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

**Unsafe Condition**

(e) This AD results from new findings of cracks found in the wing to body terminal fittings during routine inspections. We are issuing this AD to detect and correct cracks and corrosion in the body terminal fittings above and below the floor, which could cause loss of support for the wing and could adversely affect the 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 2008-17-10 With Updated Service Information**

**Inspections and Corrective Actions**

(g) For airplanes identified in Boeing 707 Special Attention Service Bulletin 3524, dated July 18, 2007: Within 24 months after October 2, 2008 (the effective date of AD 2008-17-10), do detailed inspections and applicable related investigative and corrective actions, by accomplishing all the

actions specified in the Accomplishment Instructions of Boeing 707 Special Attention Service Bulletin 3524, dated July 18, 2007; or Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008; except as provided by paragraph (h) of this AD. After the effective date of this AD, use only Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008. Repeat the detailed inspections thereafter at intervals not to exceed 24 months. Do all applicable related investigative and corrective actions before further flight.

(h) If any crack or corrosion is found during any inspection required by paragraph (g) of this AD, and Boeing 707 Special Attention Service Bulletin 3524, dated July 18, 2007, or Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, specifies to contact Boeing for appropriate action: Before further flight, repair the terminal fittings using a method approved in accordance with the procedures specified in paragraph (o) of this AD.

### **No Information Submission**

(i) Although Boeing 707 Special Attention Service Bulletin 3524, dated July 18, 2007; and Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008; specify to submit information to the manufacturer, this AD does not include that requirement.

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

#### **Inspections**

(j) For Group 1 and Group 2 airplanes identified in Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, on which a modification or repair was done in accordance with Boeing 707/720 Service Bulletin 2912, Revision 1, dated March 13, 1970: At the later of the times specified in paragraphs (j)(1) and (j)(2) of this AD, do an ultrasonic inspection to detect any stress corrosion cracks within the outboard flange of the left and right body terminal fittings at body station (STA) 820, and all applicable related investigative and corrective actions, by accomplishing all the actions specified in the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, except as provided by paragraph (m) of this AD. Repeat the ultrasonic inspection thereafter at intervals not to exceed 24 months or 2,000 flight cycles, whichever occurs first. Do all applicable related investigative and corrective actions before further flight.

(1) Within 24 months or 2,000 flight cycles after the effective date of this AD, whichever occurs first.

(2) Within 24 months or 2,000 flight cycles after doing the repair or modification, whichever occurs first.

(k) For Group 3 and Group 4 airplanes identified in Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008: Within 2,000 flight cycles or 24 months after the effective date of this AD, whichever occurs first, do an ultrasonic inspection to detect any stress corrosion cracks within the outboard flange of the left and right body terminal fittings at STA 820, and all applicable corrective actions, by accomplishing all the actions specified in the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, except as provided by paragraph (m) of this AD. Repeat the ultrasonic inspection thereafter at intervals not to exceed 24 months or 2,000 flight cycles, whichever occurs first. Do all applicable corrective actions before further flight.

(l) For Group 4 airplanes identified in Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008: Within 24 months after the effective date of this AD, do detailed inspections for corrosion and cracking of the body terminal fittings at STA 820, and all applicable related investigative and corrective actions, by accomplishing all the actions specified in the Accomplishment Instructions of Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, except as provided by paragraph (m) of this AD. Repeat the detailed inspections thereafter at intervals not to exceed 24 months. Do all applicable related investigative and corrective actions before further flight.

### **Exception to Certain Procedures**

(m) If any crack or corrosion is found during any inspection required by paragraph (j), (k), or (l) of this AD, and Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, specifies to contact Boeing for appropriate action: Before further flight, repair the terminal fittings using a method approved in accordance with the procedures specified in paragraph (o) of this AD.

Note 1: Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 2008, refers to Boeing 707/720 Service Bulletin 2912, Revision 1, dated March 13, 1970, as an additional source of guidance for doing certain inspections and repairs.

### **Optional Terminating Action**

(n) Replacing a body terminal fitting with a fitting made from 7075-T73 material, using a method approved in accordance with the procedures specified in paragraph (o) of this AD, terminates the repetitive inspections required by this AD for that fitting only.

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

(o)(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: 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**

(p) You must use Boeing 707 Alert Service Bulletin A3524, Revision 1, dated September 18, 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](mailto:me.boecom@boeing.com); Internet <https://www.myboeingfleet.com>.

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

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

Issued in Renton, Washington, on August 18, 2009.

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



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**2009-18-11 Fokker Services B.V.:** Amendment 39-16007. Docket No. FAA-2009-0515; Directorate Identifier 2008-NM-071-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Fokker Model F.28 Mark 0070 and 0100 series airplanes, certificated in any category, equipped with a downward-opening "airstair" type passenger door.

**Subject**

(d) Air Transport Association (ATA) of America Codes 11 and 52: Placards and Markings, and Doors, respectively.

**Reason**

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

"Following a red illuminated "DOOR NOT LOCKED" status light indication on the door lock indication panel after lift off, the cabin crew operated the door lock handle. This resulted in inadvertent opening of the downward opening passenger door in flight. It appeared that the cabin crew was unaware of the content of Fokker 70/100 Service Letter (SL) 272. This SL informs not to operate the door lock handle after the aircraft has started to move or before it has come to a complete standstill.

"After inspection, it was found that the false red light might be the result of an incorrect clearance between lever Part Number (P/N) A26997-003 and the Up-Limit Switch. If the Up-Limit Switch has an incorrect clearance, the combination with cabin differential pressure build-up after lift-off might result in a false steady illuminating red "DOOR NOT LOCKED" indication on the Door Indication Panel. The original Fokker Service Bulletin SBF100-52-044 and the associated Aircraft Maintenance Manual (AMM) task mentioned a clearance of 1,3 mm 0,3 mm. Later, based on a trial, an improved clearance of 0,3 mm 0,2 mm was introduced. Both documents have been revised for that reason. Later production serial number aircraft with downward opening passenger doors had the

correct clearance introduced before delivery, but no action was taken to inspect and adjust the clearance on previously delivered or modified (per SBF100-52-044) serial numbers.

"Since an unsafe condition has been identified that is likely to exist or develop on other aircraft of the same type design, this [EASA] Airworthiness Directive (AD) requires two actions:

–The installation of a warning placard near the status lights of the door lock indication panel, instructing the cabin crew not to operate the door handle during flight and to inform the flight crew of the "DOOR NOT LOCKED" indication; and

–A one-time inspection of the clearance between lever P/N A26997-003 and the Up-Limit Switch. If this clearance deviates from the limits given in AMM task 52-71-01-400-814-A, which is 0,3 mm 0,2 mm (0.0118 inch 0.0079 inch), corrective actions are required."

The unsafe condition is inadvertent opening of the door lock handle in flight, which could result in rapid decompression of the airplane or ejection of a passenger or crewmember through the door. The corrective action for improper clearance is adjusting the clearance between the lever and the up-limit switch.

### **Actions and Compliance**

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

(1) Within 500 flight cycles or 4 months after the effective date of this AD, whichever occurs first, install a new warning placard near the status lights of the panel of the door lock indication, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-11-025, Revision 1, dated December 13, 2007.

(2) Within 4,000 flight cycles after the effective date of this AD, do a one-time inspection of the clearance between lever P/N A26997-003 and the up-limit switch, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-52-086, dated November 1, 2007.

(3) If any clearance is found outside the range defined in Fokker Service Bulletin SBF100-52-086, dated November 1, 2007, during the inspection required by paragraph (f)(2) of this AD, before further flight, correct the clearance in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-52-086, dated November 1, 2007.

(4) If done before the effective date of this AD, installing the warning placard near the status lights of the panel of the door lock indication, in accordance with Fokker Service Bulletin SBF100-11-025, dated November 1, 2007, is acceptable for compliance with the requirements of paragraph (f)(1) of this AD.

(5) Modifying the airplane in accordance with Fokker Service Bulletin SBF100-52-044, Revision 1, dated November 1, 2007, terminates the requirements of paragraph (f)(2) of this AD.

## FAA AD Differences

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

Note 1 of the "Compliance" section of European Aviation Safety Agency (EASA) Airworthiness Directive 2008-0020, dated January 28, 2008, states that any airplane that has not yet been modified in accordance with Fokker Service Bulletin SBF100-52-069, dated December 3, 2001, must be modified prior to or concurrently with paragraph (f)(1) of this AD. However, all U.S. airplanes have met this requirement with the issuance of AD 2006-03-07, amendment 39-14471; therefore, modification in accordance with Fokker Service Bulletin SBF100-52-069, dated December 3, 2001, is not applicable.

## Other FAA AD Provisions

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

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

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

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

## Related Information

(h) Refer to MCAI EASA Airworthiness Directive 2008-0020, dated January 28, 2008; Fokker Service Bulletin SBF100-11-025, Revision 1, dated December 13, 2007; and Fokker Service Bulletin SBF100-52-086, dated November 1, 2007; for related information.

## Material Incorporated by Reference

(i) You must use Fokker Service Bulletin SBF100-11-025, Revision 1, dated December 13, 2007; and Fokker Service Bulletin SBF100-52-086, dated November 1, 2007; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the optional modification specified in paragraph (f)(5) of this AD, you must use Fokker Service Bulletin SBF100-52-044, Revision 1, dated November 1, 2007, to perform that modification, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Fokker Services B.V., Technical Services Dept., P.O. Box 231, 2150 AE Nieuw-Vennep, the Netherlands; telephone +31 (0)252-627-350; fax +31 (0)252-627-211; e-mail [technicalservices.fokkerservices@stork.com](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 August 18, 2009.

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



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**2009-18-12 Bombardier, Inc. (Formerly de Havilland, Inc.):** Amendment 39-16008. Docket No. FAA-2009-0526; Directorate Identifier 2009-NM-029-AD.

**Effective Date**

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

**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, 4003, 4004, 4006, and 4008 through 4154 inclusive.

**Subject**

(d) Air Transport Association (ATA) of America Code 61: Propellers/Propulsors.

**Reason**

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

Four aircraft have experienced a dual AC [alternating current] generator shutdown, caused by a broken propeller de-ice bus bar which short-circuited with the backplate assembly.

It was subsequently determined that any friction or contact between a propeller de-ice bus bar and the backplate assembly can cause an intermittent short circuit. Such a short circuit can cause a dual AC generator shutdown that, particularly in conjunction with an engine failure in icing conditions, could result in reduced controllability of the aircraft.

This [Transport Canada Civil Aviation] directive mandates revision of the Airplane Flight Manual (AFM) to introduce a procedure that restores AC power following a failure of No. 1 and No. 2 AC generators with propeller de-ice on. Additionally, in order to prevent similar dual AC generator shutdowns, it mandates the application of sealant as insulation between the propeller de-ice bus bars and the backplate assembly.

Reduced controllability of the airplane in certain operating conditions affects continued safe flight and landing.

### **Actions and Compliance**

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

(1) Within 30 days after the effective date of this AD, revise the Limitations Section of the Bombardier Dash 8 Q400 AFM, PSM 1-84-1A, by inserting a copy of Bombardier Dash 8 Q400 Temporary Amendment (TA) 14, Issue 1, dated May 10, 2006. When the information in Bombardier TA 14, Issue 1, dated May 10, 2006, is included in the general revisions of the AFM, the general revisions may be inserted in the AFM and the TA may be removed.

(2) Within 5,000 flight hours after the effective date of this AD: Apply sealant between the bus bar assemblies and the backplate assembly by incorporating Bombardier DHC-8-400 Modification Summary 4-163047, Revision B, dated August 22, 2008, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-61-03, Revision 'A,' dated September 18, 2008.

(3) Incorporating Bombardier DHC-8-400 Modification Summary Package 4-163047 before the effective date of this AD in accordance with Bombardier Service Bulletin 84-61-03, dated April 27, 2007, is considered acceptable for compliance with the requirements of paragraph (f)(2) of this AD.

### **FAA AD Differences**

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

### **Other FAA AD Provisions**

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

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

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

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

**Related Information**

(h) Refer to MCAI Canadian Airworthiness Directive CF-2009-01, dated January 19, 2009; Bombardier Dash 8 Q400 TA 14, Issue 1, dated May 10, 2006; and Bombardier Service Bulletin 84-61-03, Revision 'A,' dated September 18, 2008; for related information.

**Material Incorporated by Reference**

(i) You must use Bombardier Dash 8 Q400 Temporary Amendment 14, Issue 1, dated May 10, 2006; and Bombardier Service Bulletin 84-61-03, Revision 'A,' dated September 18, 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 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 August 18, 2009.

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



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**2009-18-13 Rolls-Royce plc:** Amendment 39-16009.; Docket No. FAA-2009-0771; Directorate Identifier 2009-NE-14-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Rolls-Royce plc (RR) model RB211 Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84 turbofan engines that do not incorporate RR modification Service Bulletin (SB) RB.211-72-G025. These engines are installed on, but not limited to, Airbus A380 airplanes.

**Reason**

(d) Evidence from development testing and flight test Trent 900 engines has identified cracking on some HP Turbine Nozzle Guide Vane (NGV) Convex Surfaces. Analysis of test data and review of the manufacturing process has revealed compounding effects that may contribute to a shortfall in component life and an increased likelihood of premature cracking in this region. Excessive cracking on the Convex Surface may lead to the release of NGV material or the blockage of Turbine gas flow. This results in a risk of fracture to the HP Turbine Blade.

We are issuing this AD to prevent the release of a high-pressure (HP) turbine blade, which could result in an engine power loss or in-flight shut down of one or more engines, resulting in an inability to continue safe flight.

**Actions and Compliance**

**First Inspection**

(e) Before accumulating 400 total cycles, inspect the HPT NGV Convex Surfaces, in accordance with the accomplishment instructions in section 3.A of Rolls-Royce RB211-Trent 900 Alert Non Modification Service Bulletin (NMSB) RB.211-72-AF995 Revision 2, dated February 9, 2009.

## **Reinspection**

(f) If no damage is identified at first inspection:

(1) Repeat the inspection at intervals less than 250 Cycles apart.

(2) If repeat inspections reveal no damage at 1000 cycles revert to normal inspection maintenance as detailed in the Rolls-Royce RB211-Trent 900 Maintenance Planning Document (MPD), and sign off this AD as complied with; no further inspections are required by this AD.

(g) If any damage is identified, refer to the Table 1 and Table 2 in section 3.B. of Rolls-Royce RB211-Trent 900 Alert NMSB RB.211-72-AF995 Revision 2, dated February 9, 2009, for reinspection intervals and rejection criteria.

## **FAA AD Differences**

(h) None.

## **Other FAA AD Provisions**

(i) 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**

(j) Refer to MCAI EASA Airworthiness Directive 2009-0051, dated March 5, 2009.

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

## **Material Incorporated by Reference**

(l) You must use RR Alert Non Mandatory Service Bulletin RB.211-72-AF995 Revision 2, dated February 9, 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 Rolls-Royce plc, P.O. Box 31, DERBY, DE24 8BJ, UK; telephone 44 (0) 1332 242424; fax 44 (0) 1332 249936.

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

Issued in Burlington, Massachusetts, on August 20, 2009.

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



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**2009-18-14 328 Support Services GmbH (Formerly, AvCraft Aerospace GmbH, formerly Fairchild Dornier GmbH, formerly Dornier Luftfahrt GmbH):** Amendment 39-16010. Docket No. FAA-2009-0522; Directorate Identifier 2008-NM-127-AD.

**Effective Date**

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

**Affected ADs**

- (b) This AD supersedes AD 2004-09-16, Amendment 39-13605.

**Applicability**

- (c) This AD applies to 328 Support Services GmbH Dornier Model 328-100 airplanes on which a rudder spring tab lever assembly having part number 001A272A4020-002 is installed, and all Model 328-300 airplanes.

**Subject**

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

**Reason**

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

On 14 March 2002, an incident occurred with a Dornier 328-100 where the captain reported that the rudder was unresponsive. The aircraft landed without any further difficulties. A visual inspection of the rudder assembly was carried out and the spring tab assembly was found to be cracked and partially missing. During subsequent inspections of other aircraft, a number of additional rudder spring tab lever assemblies were found cracked.

This condition, if not corrected, could lead to failure of the rudder flight control system and consequent loss of control of the aircraft. To address and correct this unsafe condition, LBA (Luftfahrt-Bundesamt) issued AD 2003-383 and 2003-384 [which correspond to FAA AD 2004-09-16] for the Dornier 328-100 and 328-300 respectively, to require the initial and repetitive inspection of the rudder spring tab lever assembly and, in case cracks were found, the replacement of the rudder spring tab lever assembly with a serviceable unit.

The current TC (type certificate) holder of this type design, 328 Support Services GmbH, has recently published Alert Service Bulletin ASB-328-27-036, Revision 2, which reduces the inspection interval to A-check [400 FH] (400 flight hours). In addition, Service Bulletin SB-328-27-459 was revised to change the compliance status from 'optional' to 'mandatory' and instructs operators to replace the rudder spring tab lever assembly with an improved unit P/N (part number) 001A272A4020-004, ending the need for the repetitive inspections.

For the reasons described above, this EASA AD retains the repetitive inspection requirements of LBA AD 2003-383, which is superseded, expands the applicability to all serial numbers, reduces the inspection interval to 400 [flight hours], and requires the replacement of the rudder spring tab lever assembly with an improved unit P/N 001A272A4020-004, as specified in SB-328-27-459.

## **Compliance**

(f) Required as indicated, unless accomplished previously.

### **Restatement of Requirements of AD 2004-09-16, Including Repetitive Inspections With Reduced Intervals for Model 328-100 Airplanes**

(g) For all airplanes: Within 400 flight hours or 2 months after June 9, 2004 (the effective date of AD 2004-09-16), whichever is first; do detailed and eddy current inspections for cracking of the bearing lugs of the rudder spring tab lever assembly by doing all the actions per Paragraphs 2.A., 2.B., and 2.D. of the Accomplishment Instructions of Dornier Alert Service Bulletin ASB-328-27-036 (for Model 328-100 airplanes), dated February 12, 2003, or Revision 3, dated February 8, 2008; or Dornier Alert Service Bulletin ASB-328J-27-013 (for Model 328-300 airplanes), dated February 12, 2003; as applicable.

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

(1) For Model 328-100 airplanes: If no cracking is found during any inspection required by paragraph (g) of this AD, do the next inspection within 400 flight hours after doing the last inspection, or within 400 flight hours after the effective date of this AD, whichever occurs later; and repeat the inspection thereafter at intervals not to exceed 400 flight hours. Repeat the inspections until the replacement required by paragraph (k) of this AD has been done.

(2) For Model 328-300 airplanes: If no cracking is found during any inspection required by paragraph (g) of this AD, repeat the inspections thereafter at intervals not to exceed 24 months.

## Corrective Action

(h) For all airplanes: If any cracking is found during any inspection required by paragraph (g) of this AD, do the applicable actions specified in paragraph (h)(1) or (h)(2) of this AD.

(1) For Model 328-100 airplanes: Before further flight, do the replacement required by paragraph (k) of this AD, or replace the spring tab lever assembly with a new assembly by doing all the actions per Paragraph 2.C. of the Accomplishment Instructions of Dornier Alert Service Bulletin ASB-328-27-036, dated February 12, 2003; or Revision 3, dated February 8, 2008.

(2) For Model 328-300 airplanes: Before further flight, replace the spring tab lever assembly with a new assembly by doing all the actions per Paragraph 2.C. of the Accomplishment Instructions of Dornier Alert Service Bulletin ASB-328J-27-013, dated February 12, 2003. Repeat the inspections required by paragraph (g) of this AD thereafter at intervals not to exceed 24 months.

Note 2: For Model 328-300 airplanes: There is no terminating action available for the repetitive inspections required by this AD.

(i) Dornier Alert Service Bulletins ASB-328-27-036, dated February 12, 2003, and Revision 3, dated February 8, 2008; and ASB-328J-27-013, dated February 12, 2003; recommend reporting crack findings and returning damaged lever assemblies to the manufacturer, but this AD does not contain such requirements.

## New Requirements of This AD: Actions and Compliance

(j) For Model 328-100 airplanes: As of the effective date of this AD, Dornier Alert Service Bulletin ASB-328-27-036, Revision 3, dated February 8, 2008, must be used for accomplishing the inspections and corrective actions required by paragraphs (g) and (h) of this AD.

(k) For Model 328-100 airplanes: Within 6 months after the effective date of this AD, replace any rudder spring tab lever assembly having P/N 001A272A4020-002 with an improved unit having P/N 001A272A4020-004, in accordance with the Accomplishment Instructions of Dornier Service Bulletin SB-328-27-459, Revision 2, dated February 8, 2008. Accomplishment of the replacement required by this paragraph terminates the repetitive inspections required by paragraph (g)(1) of this AD.

(l) Actions done before the effective date of this AD in accordance with Dornier Service Bulletin SB-328-27-459, dated May 3, 2004; or Revision 1, dated January 24, 2008; are acceptable for compliance with the corresponding requirements of this AD for Model 328-100 airplanes. Actions done before the effective date of this AD in accordance with Dornier Alert Service Bulletin ASB-328-27-036, Revision 1, dated May 7, 2004; or Revision 2, dated January 24, 2008; are acceptable for compliance with the corresponding requirements of this AD for Model 328-300 airplanes.

## FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows: No differences.

## Other FAA AD Provisions

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

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

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

## Related Information

(n) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2008-0107, dated June 23, 2008; German Airworthiness Directive 2003-384, dated November 13, 2003; and the service information contained in Table 1 of this AD, for related information.

**Table 1 – Related Service Information**

<b>Document</b>	<b>Revision</b>	<b>Date</b>
Dornier Alert Service Bulletin ASB-328-27-036	3	February 8, 2008
Dornier Alert Service Bulletin ASB-328J-27-013	Original	February 12, 2003
Dornier Service Bulletin SB-328-27-459	2	February 8, 2008

## Material Incorporated by Reference

(o) You must use the applicable service information contained in Table 2 of this AD to do the actions required by this AD, unless the AD specifies otherwise. (The issue date of Dornier Alert Service Bulletin ASB-328-27-036, Revision 3, dated February 8, 2008; and Dornier Service Bulletin SB-328-27-459, Revision 2, dated February 8, 2008; is specified only on the odd-numbered pages of these documents.)

**Table 2 – Material incorporated by reference**

<b>Document</b>	<b>Revision</b>	<b>Date</b>
Dornier Alert Service Bulletin ASB-328-27-036	3	February 8, 2008
Dornier Alert Service Bulletin ASB-328J-27-013	Original	February 12, 2003
Dornier Service Bulletin SB-328-27-459	2	February 8, 2008

(1) The Director of the Federal Register approved the incorporation by reference of Dornier Alert Service Bulletin ASB-328-27-036, Revision 3, dated February 8, 2008; and Dornier Service Bulletin SB-328-27-459, Revision 2, dated February 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 the Dornier Alert Service Bulletin ASB-328J-27-013, dated February 12, 2003, on June 9, 2004 (69 FR 24953, May 5, 2004).

(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 August 24, 2009.

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



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**2009-18-16 Airbus:** Amendment 39-16012. Docket No. FAA-2009-0465; Directorate Identifier 2007-NM-244-AD.

**Effective Date**

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

**Affected ADs**

- (b) This AD supersedes AD 2006-02-06, Amendment 39-14458.

**Applicability**

(c) This AD applies to Airbus Model A310-203, -204, -221, -222, -304, -322, -324 and -325 airplanes; all serial numbers; certificated in any category; except those airplanes on which Airbus Mandatory Service Bulletin A310-53-2124, dated April 4, 2005, has been accomplished.

**Subject**

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

**Reason**

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

DGAC [Direction Générale de l'Aviation Civile] France issued AD F-2005-078 [which corresponds to FAA AD 2006-02-06, Amendment 39-14458, 71 FR 3214, January 20, 2006] to require the modification (Airbus modification 13023), defined in Airbus SB [service bulletin] A310-53-2124, to increase the service life of junctions of center box upper frame bases to upper fuselage arches. This structural modification falls within the scope of the work related to the extension of the service life of A310 aircraft and widespread fatigue damage evaluations.

The threshold timescales for accomplishment of the tasks as defined in SB A310-53-2124 were refined and reduced. Consequently, EASA issued AD 2007-0238 to require compliance with Revision 1 of SB A310-53-2124 at the reduced compliance times, superseding (the requirements of) DGAC France AD F-2005-078. Subsequently, Airbus identified reference material that was erroneously introduced into Airbus SB A310-53-2124 Revision 1. As a result, the SB instructions could not be accomplished properly. Operators that tried to apply SB A310-53-2124 at Revision 1 had to contact Airbus; see

also Airbus SBIT [service bulletin information telex] ref. 914.0135/08, dated 03 March 2008.

Consequently, AD 2007-0238 was revised to exclude reference to Airbus SB A310-53-2124 Revision 1 and to require accomplishment of the task(s) as described in the original SB A310-53-2124 instead, although retaining the reduced compliance times introduced by AD 2007-0238 at original issue. This new [EASA] AD is published to refer to Airbus SB A310-53-2124 Revision 02, the corrected version that is to be used to meet the requirements of this AD.

The unsafe condition is fatigue cracking of the frame foot run-outs, which could lead to rupture of the frame foot and cracking in adjacent frames and skin, and which could result in reduced structural integrity of the fuselage. The required actions include inspecting by rotating probe for cracking of holes H1 through H29 on frame (FR) 43 through 46 inclusive, and inspecting holes H1 through H29 on FR 43 through 46 inclusive to determine the edge distance of the hole, and corrective actions if necessary.

### **Requirements of This AD: Actions and Compliance**

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

(1) Except for airplanes identified in paragraph (f)(2) of this AD, at the later of the times specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, accomplish inspections by rotating probe for cracking of holes H1 through H29 on frame FR 43 through 46 inclusive, and inspections of holes H1 through H29 on FR 43 through 46 inclusive to determine the edge distance of the hole, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A310-53-2124, Revision 02, dated May 22, 2008 ("the service bulletin"). If no cracking is found and the edge distance is equal to or greater than the distance specified in the Accomplishment Instructions of the service bulletin, before further flight, do the cold expansion of the most fatigue sensitive fastener holes, as identified in the service bulletin.

(i) Inspect at the applicable time indicated in Table 1 of this AD. Airbus Model A310-304, -322, -324, and -325 airplanes with an average flight time (AFT) equal to or less than 3.17 flight hours are short range airplanes. Airbus Model A310-304, -322, -324, and -325 airplanes with an AFT exceeding 3.17 flight hours are long range airplanes.

(ii) Within 500 flight cycles or 800 flight hours after the effective date of this AD, whichever occurs first.

**Table 1 – Compliance Times**

<b>Affected Airplanes</b>	<b>Inspection/Modification Threshold, whichever occurs later</b>	
Model A310-304, -322, -324 and -325 short range airplanes	Prior to accumulation of 26,500 flight cycles or 74,300 flight hours since first flight of the airplane, whichever occurs first	Within 3,000 flight cycles after the effective date of this AD, without exceeding 29,200 flight cycles or 81,800 flight hours since first flight, whichever occurs first
Model A310-304, -322, -324 and -325 long range airplanes	Prior to accumulation of 23,400 flight cycles or 117,100 flight hours since first flight of the airplane, whichever occurs first	Within 3,000 flight cycles after the effective date of this AD, without exceeding 25,800 flight cycles or 129,000 flight hours since first flight, whichever occurs first
Model A310-203, -204, -221, and A310-222	Prior to accumulation of 23,400 flight cycles or 46,800 flight hours since first flight of the airplane, whichever occurs first	Within 3,000 flight cycles after the effective date of this AD, without exceeding 28,800 flight cycles or 57,700 flight hours since first flight, whichever occurs first

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

(2) For airplanes that have been modified before the effective date of this AD in accordance with Airbus Mandatory Service Bulletin A310-53-2124, Revision 01, dated May 3, 2007: Within 500 flight cycles or 800 flight hours after the effective date of this AD, whichever occurs first, contact Airbus and follow their corrective actions.

(3) If, during any inspection required by paragraph (f)(1) of this AD, any cracking is found or if the edge distance is less than the distance specified in Airbus Mandatory Service Bulletin A310-53-2124, Revision 02, dated May 22, 2008, before further flight, contact Airbus and follow their corrective actions.

### **FAA AD Differences**

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

### **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, 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 Stafford, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-1622; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance

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

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

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

### **Related Information**

(h) Refer to MCAI European Union Airworthiness Directive 2008-0212, dated December 4, 2008; and Airbus Mandatory Service Bulletin A310-53-2124, Revision 02, dated May 22, 2008; for related information.

### **Material Incorporated by Reference**

(i) You must use Airbus Mandatory Service Bulletin A310-53-2124, Revision 02, dated May 22, 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 Airbus Service Bulletin A310-53-2124, Revision 02, dated May 22, 2008, under 5 U.S.C. 552 (a) and 1 CF 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 August 24, 2009.

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



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**2009-18-18 ATR–GIE Avions De Transport Régional (Formerly Aerospatiale):** Amendment 39-16014. Docket No. FAA-2009-0786; Directorate Identifier 2009-NM-145-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective September 24, 2009.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to ATR Model ATR42-200, -300, -320, and -500 airplanes and Model ATR72-101, -201, -102, -202, -211, -212, and -212A airplanes; certificated in any category; that are equipped with any PPG Aerospace cockpit forward side glass window having part number (P/N) NP-158862-1 or NP-158862-2.

**Subject**

- (d) Air Transport Association (ATA) of America Code 56: Windows.

**Reason**

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

A recent event occurred during which the LH [left-hand] forward side glass window of an ATR 72-212 aeroplane blew out while performing a ground pressure test.

The investigation revealed some anomalies on the forward side window at the level of the Z-bar on the windows external side and at the level of the inner retainer on the windows internal side. These anomalies are considered as precursors of this failure.

Air or water leakages between the Z-bar and the outer glass ply, or between the inner retainer and inner glass ply indicates the presence of deteriorating structural components in the window.

It must also be noticed that neither ATR nor PPG Aerospace authorizes repairs on the window Z-bar/Z-bar sealant.

Any attempted repairs on these forward side window Z-bars/Z-bar sealants could lead to a similar event that has originated this AD.

An in-flight loss of a forward side window could have catastrophic consequences for the aeroplane and/or cause injuries to people on the ground. The loss of the forward side window while the aeroplane is on the ground with a positive differential cabin pressure could also cause injuries to people inside or around the aeroplane.

Accordingly, this AD mandates initial and repetitive inspections of LH and RH [right-hand] cockpit forward side glass windows and in case of discrepancies, the replacement of the window(s).

Remark: Acrylic-based cockpit forward side windows are not concerned by this AD.

### **Actions and Compliance**

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

(1) Prior to the accumulation of 2,000 total flight cycles on any cockpit forward side window, or within 10 days after the effective date of this AD, whichever occurs later, inspect for damage and absence of repair of the cockpit forward side windows, in accordance with the Accomplishment Instructions of PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009. If the total flight cycles on a given cockpit forward side window installed on an airplane cannot be established, the total flight cycles accumulated on the airplane must be used in determining the initial inspection time for the cockpit forward side window.

(i) If any discrepant condition, as defined in PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009, is found: Replace the window, in accordance with a method approved by the Manager, ANM-116, International Branch, Transport Airplane Directorate, FAA, or EASA (or its delegated agent), before further pressurized flight or within 10 days after the inspection, whichever occurs first.

Note 1: Guidance on replacing windows may be found in ATR (ATR42) Aircraft Maintenance Manual (AMM) Job Instruction Card (JIC) 56-12-00 RAI 10000-011, dated February 2008; and ATR ATR72 AMM JIC 56-12-00 RAI 10000-001, dated April 2008.

Note 2: Guidance on unpressurized flight conditions and limitations may be found in Section 21-30-1, dated February 2008, of the ATR Master Minimum Equipment List; and Section 21-30-1, dated February 2008, of the ATR Dispatch Deviation Guide.

(ii) If one of the conditions identified in paragraphs (f)(1)(ii)(a), (f)(1)(ii)(b), and (f)(1)(ii)(c) of this AD is found: Within 50 flight cycles or 7 days after the inspection required by paragraph (f)(1) of this AD, whichever occurs later, repeat the inspection required in paragraph (f)(1) of this AD. Re-inspect at intervals not to exceed 50 flight cycles or 7 days, whichever occurs later. When any discrepant condition, as defined in PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009, is found: Replace the window, in accordance with a method approved by the Manager, ANM-116, International Branch, Transport Airplane Directorate, FAA, or EASA (or its delegated agent), before further pressurized flight or within 10 days after the inspection, whichever occurs first.

(a) Sealant separation between the Z-bar and the outer glass ply, with depth less than or equal to 4 mm (0.160 in).

(b) Sealant separation between inboard retainer and inner glass ply, with depth less than or equal to 7.5 mm (0.300 in) and cumulative length less than or equal to 300 mm (12.000 in).

(c) Window showing both sealant separation between the Z-bar and the outer ply, and separation between inboard retainer and inner glass ply, common to the same hole location with a length less than or equal to 225 mm (8.860 in), and not covering the entire arc of a window corner.

(iii) If no discrepancy is found: Re-inspect the cockpit forward side windows at intervals not to exceed 550 flight hours, in accordance with the Accomplishment Instructions of PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009. When any discrepant condition, as defined in PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009, is found: Replace the window, in accordance with a method approved by the Manager, ANM-116, International Branch, Transport Airplane Directorate, FAA, or EASA (or its delegated agent), before further pressurized flight or within 10 days after the inspection, whichever occurs first.

(2) Within 30 days after any inspection when damage or a discrepancy is found or within 30 days after the effective date of this AD, whichever occurs later, submit a detailed report of the findings to ATR in accordance with PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009.

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

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

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

(4) Special Flight Permits: We are permitting special flight permits provided that the airplane is unpressurized during flight.

## **Related Information**

(h) Refer to MCAI European Aviation Safety Agency (EASA) Emergency Airworthiness Directive 2009-0159-E, dated July 20, 2009; and PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009; for related information.

## **Material Incorporated by Reference**

(i) You must use PPG Aerospace Service Bulletin NP-158862-001, dated July 8, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact PPG Aerospace, 12780 San Fernando Road, Sylmar, California 91342; telephone 818-362-6711; fax 818-362-0603; Internet <http://corporateportal.ppg.com/na/aerospace>.

(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 August 26, 2009.

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



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**2009-18-19 Airbus:** Amendment 39-16016. Docket No. FAA-2009-0381; Directorate Identifier 2009-NM-008-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

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

(1) Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes, all serial numbers.

(2) Airbus Model A340-211, -212, -213, -311, -312, and -313 series airplanes, all serial numbers.

**Subject**

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

**Reason**

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

An A340 operator has reported an uncommanded engine N°4 shut down during taxi after landing.

The root cause of this event has been identified as failure of the fuel pump Non Return Valve (NRV) preventing the collector cell jet pump from working. This led to engine N°4 collector cell fuel level to drop below the pump inlet and consequently causing engine N°4 flame out.

A330 aircraft which have a similar design are also impacted by this issue.

Multiple NRV failures in combination with failure modes trapping fuel could potentially increase the quantity of unusable fuel on aircraft possibly leading to fuel starvation which could result in engine in-flight shut down and would constitute an unsafe condition.

To prevent such an event, this Airworthiness Directive (AD) requires a periodic operational test to check the correct operation of NRV and to apply the associated corrective actions.

The corrective action includes replacing any failed NRV with a new NRV.

## **Actions and Compliance**

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

(1) For Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes: At the later of the times in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, perform an operational test for correct functioning of the NRV and apply all applicable corrective actions, in accordance with instructions defined in Airbus Mandatory Service Bulletin A330-28-3108, including Appendix 1, dated October 13, 2008. Do all applicable corrective actions before further flight.

(i) Within 24 months or 8,000 flight hours after the effective date of this AD, whichever occurs first.

(ii) Before the accumulation of 10,000 total flight hours after the first flight of the airplane.

(2) For Airbus Model A340-211, -212, -213, -311, -312, and -313 series airplanes: At the later of the times in paragraphs (f)(2)(i) and (f)(2)(ii) of this AD, perform an operational test for correct functioning of the NRV and apply all applicable corrective actions, in accordance with instructions defined in Airbus Mandatory Service Bulletin A340-28-4123, including Appendix 1, dated October 13, 2008. Do all applicable corrective actions before further flight.

(i) Within 24 months or 9,000 flight hours after the effective date of this AD, whichever occurs first.

(ii) Before the accumulation of 25,000 total flight hours after the first flight of the airplane.

(3) Repeat the operational test specified in paragraph (f)(1) or (f)(2) of this AD as applicable, at the applicable interval in paragraph (f)(3)(i) or (f)(3)(ii) of this AD.

(i) For Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes: At intervals not to exceed 10,000 flight hours.

(ii) For Airbus Model A340-211, -212, -213, -311, -312, and -313 series airplanes: At intervals not to exceed 25,000 flight hours.

(4) Submit a report of the findings (both positive and negative) of the inspection required by paragraph (f)(1) or (f)(2) of this AD to Airbus, at the time specified in paragraph (f)(4)(i) or (f)(4)(ii) of this AD, as applicable. The report must include the information specified in Appendix 1 of Airbus Mandatory Service Bulletin A330-28-3108 or A340-28-4123, both dated October 13, 2008, as applicable. Send the report to Airbus Department SEEE6, Airbus Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex France, Attn: SDC32 Technical Data and Documentation Services; fax: +33 5 61 93 28 06; e-mail: sb.reporting@airbus.com.

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

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

## FAA AD Differences

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

## Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, 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 appropriate principal maintenance inspector (PMI) or the 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 2008-0209, dated November 27, 2008; Airbus Mandatory Service Bulletins A330-28-3108 and A340-28-4123, both including Appendix 1, both dated October 13, 2008; for related information.

## Material Incorporated by Reference

(i) You must use Airbus Mandatory Service Bulletin A330-28-3108, including Appendix 1, dated October 13, 2008; or Airbus Mandatory Service Bulletin A340-28-4123, including Appendix 1, dated October 13, 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 Airbus SAS—Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; 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).

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Issued in Renton, Washington, on August 26, 2009.  
Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-18-20 Airbus:** Amendment 39-16017. Docket No. FAA-2009-0264; Directorate Identifier 2008-NM-174-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Airbus Model A330-300, A340-200, and A340-300 series airplanes; certificated in any category; as identified in paragraphs (c)(1) and (c)(2) of this AD.

- (1) Airbus Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, manufacturer serial numbers (MSNs) up to and including MSN 588, except those on which Airbus Service Bulletin A330-27-3110 has been embodied in service.

- (2) Airbus Model A340-211, -212, -213, -311, -312, and -313 airplanes, MSNs up to and including MSN 598, except those on which Airbus Service Bulletin A340-27-4115 has been embodied in service.

**Subject**

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

**Reason**

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

One Long Range operator experienced a failure of one spoiler servo-control, associated with surface deflection in flight and hydraulic leak. On ground, this servo-control Part Number (P/N) MZ4306000-02X was found with the maintenance cover broken. Investigations showed that the rupture of the maintenance cover was due to pressure pulse fatigue.

The maintenance cover allows switching the servo-control from "Operational" to "Maintenance" modes. The same cover is installed on all standard MZ spoiler servo-controls except on P/N MZ4339390-12 and MZ4306000-12, which have a reinforced maintenance cover. The rupture of the maintenance cover in flight may result in the deflection of the associated spoiler surface up to the null-hinge position (loss of the

hydraulic locking). It may also result in the loss of the associated hydraulic system (external leakage). In the worst case, the three hydraulic systems may be affected, which constitutes an unsafe condition.

For the reasons described above, this EASA (European Aviation Safety Agency) AD requires the identification and the modification of all standard MZ spoiler servo-controls with initial maintenance cover (P/N MZ4339390-01X, -02X, -10X for position 1 and P/N MZ4306000-01X, 02X, -10X for positions 2 to 6) into standard MZ servo-controls with reinforced maintenance cover (P/N MZ4339390-12 for position 1 and P/N MZ4306000-12 for positions 2 to 6).

Loss of the three hydraulic systems could result in reduced controllability of the airplane.

### **Actions and Compliance**

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

(1) For airplanes that have accumulated more than 8,500 total flight cycles since first flight of the airplane as of the effective date of this AD: Do the actions required by paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, as applicable.

(i) Within 3 months after the effective date of this AD: Identify the part number of spoiler servo-controls installed on the airplane at all positions in order to determine the number of affected hydraulic circuits in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-27A3154, Revision 01; or Airbus Mandatory Service Bulletin A340-27A4154, Revision 01; both dated July 25, 2008; as applicable. If there is no spoiler servo-control installed with a part number identified in Table 1 of this AD, no further action is required by this paragraph.

(ii) If there is any spoiler servo-control installed with a part number identified in Table 1 of this AD, do all applicable actions required by paragraph (f)(2), (f)(3), or (f)(4) of this AD, as applicable.

**Table 1 – Spoiler Servo-Control Part Numbers**

<b>Position 1</b>	<b>Positions 2 through 6</b>
MZ4339390-01X	MZ4306000-01X
MZ4339390-02X	MZ4306000-02X
MZ4339390-10X	MZ4306000-10X

(2) If three affected hydraulic circuits are identified during the inspection required by paragraph (f)(1) of this AD, do the actions required by paragraphs (f)(2)(i), (f)(2)(ii), and (f)(2)(iii) of this AD, at the time specified.

(i) Before the accumulation of 10,400 total flight cycles since first flight of the airplane, or within 3 months after accomplishing the requirements of paragraph (f)(1)(i) of this AD, whichever occurs later: Modify the affected spoiler servo-controls on one hydraulic circuit in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(ii) Before the accumulation of 10,800 total flight cycles since first flight of the airplane, or within 6 months after accomplishing the requirements in paragraph (f)(1)(i) of this AD, whichever occurs later: Modify the affected spoiler servo-controls on the second hydraulic circuit in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(iii) Within 18 months after the effective date of this AD: Modify the remaining affected spoiler servo-controls in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(3) If two affected hydraulic circuits are identified during the inspection required by paragraph (f)(1) of this AD, do the actions required by paragraphs (f)(3)(i) and (f)(3)(ii) of this AD, at the time specified.

(i) Before the accumulation of 10,800 total flight cycles since first flight of the airplane, or within 6 months after accomplishing the requirements specified in paragraph (f)(1)(i) of this AD, whichever occurs later: Modify the affected spoiler servo-controls on one hydraulic circuit in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(ii) Within 18 months after the effective date of this AD: Modify the remaining affected spoiler servo-controls in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(4) If one affected hydraulic circuit is identified during the inspection required by paragraph (f)(1) of this AD: Within 18 months after the effective date of this AD, modify the affected spoiler servo-controls in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(5) For airplanes that have accumulated less than or equal to 8,500 total flight cycles since first flight of the airplane as of the effective date of this AD: Do the actions required by paragraphs (f)(5)(i) and (f)(5)(ii) of this AD, as applicable.

(i) Within 9 months after the effective date of this AD: Do the actions specified in paragraph (f)(1)(i) of this AD. If there is no spoiler servo-control installed with a part number identified in Table 1 of this AD, no further action is required by this paragraph.

(ii) If there is any spoiler servo-control installed with a part number identified in Table 1 of this AD: Within 18 months after the effective date of this AD, modify all the affected spoiler servo-controls in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(6) As of the effective date of this AD, no person may install any spoiler servo-control with a part number identified in Table 1 of this AD on any airplane as a replacement part, unless the part has been modified in accordance with the Accomplishment Instructions of Airbus Service Bulletin A330-27-3110, Revision 03, dated September 3, 2008; or Airbus Service Bulletin A340-27-4115, Revision 01, dated March 2, 2007; as applicable.

(7) Actions accomplished before the effective date of this AD in accordance with the service bulletins specified in Table 2 of this AD are considered acceptable for compliance with the corresponding requirements of this AD.

**Table 2 – Credit Service Information**

<b>Service Bulletin</b>	<b>Revision Level</b>	<b>Date</b>
Airbus Service Bulletin A330-27-3110	Original	November 28, 2003
Airbus Service Bulletin A330-27-3110	01	March 26, 2004
Airbus Service Bulletin A330-27-3110	02	March 2, 2007
Airbus Service Bulletin A340-27-4115	Original	November 28, 2003

**FAA AD Differences**

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

**Other FAA AD Provisions**

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

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

(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 EASA Airworthiness Directive 2008-0160, dated August 22, 2008, and the service bulletins specified in Table 3 of this AD, for related information.

**Table 3 – Related Service Information**

<b>Service Bulletin</b>	<b>Revision Level</b>	<b>Date</b>
Airbus Mandatory Service Bulletin A330-27A3154	01	July 25, 2008
Airbus Mandatory Service Bulletin A340-27A4154	01	July 25, 2008
Airbus Service Bulletin A330-27-3110	03	September 3, 2008
Airbus Service Bulletin A340-27-4115	01	March 2, 2007

**Material Incorporated by Reference**

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

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

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

**Table 4 – Material Incorporated by Reference**

<b>Service Bulletin</b>	<b>Revision Level</b>	<b>Date</b>
Airbus Mandatory Service Bulletin A330-27A3154, excluding Appendix 1	01	July 25, 2008
Airbus Mandatory Service Bulletin A340-27A4154, excluding Appendix 1	01	July 25, 2008
Airbus Service Bulletin A330-27-3110	03	September 3, 2008
Airbus Service Bulletin A340-27-4115	01	March 2, 2007

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

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



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**2009-19-01 Airbus:** Amendment 39-16018. Docket No. FAA-2009-0397; Directorate Identifier 2008-NM-023-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Airbus Model A300 B2-1C, B2-203, B2K-3C, B4-103, B4-203, and B4-2C airplanes, certificated in any category, all serial numbers, except airplanes which have been modified in accordance with Airbus Mandatory Service Bulletin A300-57-0252 (Airbus Modification 13400).

**Subject**

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

**Reason**

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

An operator has reported the loss of a centre flap inner tab on an in-service A300 aircraft. The centre flap inner tab detached during approach to an airport. A similar event was reported several years ago on a pre-mod 04770 aircraft. Previous failure at the aft lug of the centre brackets led to the issuance of Airbus Service Bulletin A300-57-0205.

In the most recent case, the aircraft had been modified in accordance with Airbus Service Bulletin A300-57-0205 (Airbus modification No. 04770). Investigations led by the manufacturer revealed that the centre hinge bracket developed a fatigue crack causing complete failure of the bracket. The tab rotated causing failure of the inboard link followed by the failure of the outboard link.

To avoid a detachment of a centre flap inner tab, which could be a potential risk to persons on [the] ground, this AD requires a repetitive [high frequency eddy current] inspection of the centre flap inner tab hinge bracket and replacement of the bracket when

cracks are detected \* \* \* [and] reporting of inspection results to the TC holder [and provides] an optional terminating action. \* \* \*

\* \* \* \* \*

## Actions and Compliance

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

(1) At the times specified in Table 1 or Table 2 of this AD, as applicable, perform a high frequency eddy current inspection to detect fatigue cracks of the center hinge bracket of the center flap inner tab (on both wings), in accordance with Airbus Mandatory Service Bulletin A300-57-0250, Revision 01, dated September 29, 2008. If no cracking is found, repeat the inspection thereafter at intervals not to exceed 850 flight cycles.

**Table 1 – Airplanes on which Airbus Service Bulletin A300-57-0205 has not been done**

<b>Flight Cycles accumulated since first flight as of the effective date of this AD</b>	<b>Compliance Time</b>
Less than 6,000 flight cycles	Prior to accumulating 6,000 flight cycles since first flight or within 90 days after the effective date of this AD, whichever occurs later
6,000 flight cycles or more, but less than 12,000 flight cycles	Within 850 flight cycles after the effective date of this AD
12,000 flight cycles or more	Within 500 flight cycles after the effective date of this AD

**Table 2 – Airplanes on which Airbus Service Bulletin A300-57-0205 has been done**

<b>Flight Cycles accumulated since Airbus Service Bulletin A300-57-0205 modification as of the effective date of this AD</b>	<b>Compliance Time</b>
Less than 6,000 flight cycles	Prior to accumulating 6,000 flight cycles since Airbus Service Bulletin A300-57-0205 modification or within 90 days after the effective date of this AD, whichever occurs later
6,000 flight cycles or more, but less than 12,000 flight cycles	Within 850 flight cycles after the effective date of this AD
12,000 flight cycles or more	Within 500 flight cycles after the effective date of this AD

(2) If any crack is detected during any inspection required by this AD, before further flight, replace the center hinge bracket in the accordance with Airbus Mandatory Service Bulletin A300-57-0250, Revision 01, dated September 29, 2008. Within 6,000 flight cycles after replacing the center hinge bracket, do the inspection required by paragraph (f)(1) of this AD, and if no cracking is found, repeat the inspection thereafter at intervals not to exceed 850 flight cycles.

(3) Modifying the inboard tab of the center flaps in accordance with Airbus Mandatory Service Bulletin A300-57-0252, dated August 27, 2008, terminates the requirements of this AD.

(4) Actions accomplished before the effective date of this AD in accordance with Airbus Mandatory Service Bulletin A300-57-0250, dated November 2, 2007, are considered acceptable for compliance with the corresponding actions specified in this AD.

### **FAA AD Differences**

Note 1: This AD differs from the MCAI and/or service information as follows: Although the European Aviation Safety Agency AD 2007-0299R2, dated October 28, 2008 and Airbus Mandatory Service Bulletin A300-57-0250, dated November 2, 2007, specify to submit certain information to the manufacturer, this AD does not include that requirement.

### **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: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office.

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

### **Related Information**

(h) Refer to MCAI Airworthiness Directive 2007-0299R2, dated October 28, 2008; Airbus Mandatory Service Bulletin A300-57-0250, Revision 01, dated September 29, 2008; and Airbus Mandatory Service Bulletin A300-57-0252, dated August 27, 2008; for related information.

### **Material Incorporated by Reference**

(i) You must use Airbus Mandatory Service Bulletin A300-57-0250, Revision 01, excluding Appendix 1, dated September 29, 2008, to do the actions required by this AD, unless the AD specifies otherwise. If you do the optional terminating modification specified by this AD, you must use Airbus Service Bulletin A300-57-0252, dated August 27, 2008, to perform that action, 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; 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 August 31, 2009.

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



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**2009-19-02 Boeing:** Amendment 39-16019. Docket No. FAA-2009-0212; Directorate Identifier 2008-NM-122-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all Boeing Model 737-600, -700, -700C, -800, -900 and -900ER series airplanes, certificated in any category.

**Subject**

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

**Unsafe Condition**

(e) This AD results from reports of low rudder pedal forces that were caused by a broken inner spring in the rudder feel and centering unit; a broken inner spring in conjunction with a broken outer spring would significantly reduce rudder pedal forces. We are issuing this AD to prevent reduced rudder pedal forces, which could result in increased potential for pilot-induced oscillations and reduce the ability of the flightcrew to maintain the safe flight and landing of the airplane.

**Compliance**

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

**Test/Inspection**

(g) For Model 737-600, -700, -700C, -800, and -900 series airplanes identified in Boeing Alert Service Bulletin 737-27A1287, dated April 16, 2008: Within 30 days after the effective date of this AD, perform a test of the rudder pedal forces or a detailed inspection of the inner spring of the rudder feel and centering unit, by doing all the applicable actions, including all applicable corrective actions before further flight, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-27A1287, dated April 16, 2008. Repeat the test or inspection thereafter at intervals not to exceed 120 days.

## **Terminating Action**

(h) For Model 737-600, -700, -700C, -800, and -900 series airplanes identified in Boeing Alert Service Bulletin 737-27A1287, dated April 16, 2008: Within 36 months after the effective date of this AD, replace the spring assembly in the rudder feel and centering unit in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-27A1287, dated April 16, 2008. Accomplishing the replacement ends the repetitive tests or inspections required by paragraph (g) of this AD.

## **Parts Installation**

(i) For all airplanes: As of the effective date of this AD, no person may install, on any airplane, a rudder feel and centering unit having part number (P/N) 65C25410-7, serial numbers 3609 through 3820 inclusive, unless it has been modified according to paragraph (h) of this AD.

## **No Reporting Required**

(j) Boeing Alert Service Bulletin 737-27A1287, dated April 16, 2008, specifies sending a data reporting sheet to Boeing; however, this AD does not require that action.

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

(k)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, ATTN: Kelly McGuckin, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6490; fax (425) 917-6590; has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

(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.

## **Material Incorporated by Reference**

(l) You must use Boeing Alert Service Bulletin 737-27A1287, dated April 16, 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 August 31, 2009.  
Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.