



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2009-14**

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Federal Aviation Administration  
Regulatory Support Division  
Delegation and Airworthiness Programs Branch, AIR-140  
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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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AD No.	Information	Manufacturer	Applicability
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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

### Biweekly 2009-05

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 2006-12-19	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
2009-12-13		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



**CORRECTION:** [*Federal Register: June 25, 2009 (Volume 74, Number 121)*]; Page 30211;  
[www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)]

**2009-04-18 Pratt & Whitney:** Amendment 39-15824. Docket No. FAA-2008-0759; Directorate Identifier 2008-NE-02-AD.

### **Effective Date**

- (a) This airworthiness directive (AD) becomes effective May 5, 2009.

### **Affected ADs**

- (b) None.

### **Applicability**

(c) This AD applies to Pratt & Whitney (PW) JT9D-7, -7A, -7AH, -7H, -7F, and -7J turbofan engines. These engines are installed on, but not limited to, Boeing 747 series airplanes.

### **Unsafe Condition**

(d) This AD results from an uncontained failure of a 2nd stage high-pressure turbine (HPT) rotor disk that caused the engine to separate from the airplane. We are issuing this AD to prevent failure of the 2nd stage HPT rotor disk, which could result in uncontained engine failure, damage to the airplane, and the engine separating from the airplane.

### **Compliance**

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

### **Initial Borescope Inspection**

(f) Within 100 cycles-in-service (CIS) after the effective date of this AD, or within 1,000 CIS after the last installation of the second stage HPT vanes, whichever occurs later, do the following:

(1) Use the Accomplishment Instructions of PW Alert Service Bulletin (ASB) JT9D A6488, Revision 1, dated April 18, 2008, to borescope-inspect the 2nd stage HPT rotor and stator assembly either on-wing or in the shop.

(2) If you see any damage or contact between the 2nd stage HPT vanes and the 2nd stage HPT rotor, remove the engine from service.

### **Repetitive Borescope Inspection**

(g) Thereafter, within 1,000 cycles-since-last inspection, do the following:

(1) Use the Accomplishment Instructions of PW ASB JT9D A6488 Revision 1, dated April 18, 2008, to borescope-inspect the 2nd stage HPT rotor and stator assembly either on-wing or in the shop.

(2) If you see any damage or contact between the 2nd stage HPT vanes and the 2nd stage HPT rotor, remove the engine from service.

### **Optional Terminating Action**

(h) Installing the 2nd stage HPT vanes as specified in paragraphs 1.B.(1) through 1.B.(32) of Section 72-51-00, Assembly-02 of the JT9D-7 Engine Manual Revision 122, dated February 15, 2008, terminates the repetitive inspection requirement specified in paragraph (g) of this AD.

### **Alternative Methods of Compliance**

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

### **Related Information**

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

### **Material Incorporated by Reference**

(k) You must use the service information specified in the following Table 1 to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in the following Table 1 in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Contact Pratt & Whitney, 400 Main St., East Hartford, CT 06108; telephone (860) 565-8770; fax (860) 565-4503, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

**Table 1—Incorporation by Reference**

<b>Service information No.</b>	<b>Page</b>	<b>Revision</b>	<b>Date</b>
Pratt & Whitney JT9D Engine Maintenance Manual PN 770408, Section 72-51-00, Assembly-02  Total Pages—36	1001 through 1036	122	February 15, 2008.
Pratt & Whitney PW ASB JT9D A6488, Revision 1, dated April 18, 2008.  Total Pages—21	All	1	April 18, 2008.

Issued in Burlington, Massachusetts, on March 17, 2009.  
Francis A. Favara,  
Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



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**2009-13-02 Fokker Services B.V.:** Amendment 39-15941. Docket No. FAA-2009-0198; Directorate Identifier 2008-NM-129-AD.

**Effective Date**

- (a) This AD becomes effective August 3, 2009.

**Affected ADs**

- (b) This AD supersedes AD 98-06-07.

**Applicability**

- (c) This AD applies to Fokker Model F.28 Mark 0100 airplanes, certificated in any category, equipped with Rolls-Royce (RR) TAY 650-15 engines.

**Subject**

- (d) Air Transport Association (ATA) of America Code 76: Engine controls.

**Unsafe Condition**

- (e) This AD results from issuance of mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. We are issuing this AD to prevent inadvertent operation in the prohibited stabilized engine speed range on the ground, which could result in uncontained engine fan blade failure due to high cycle fatigue cracking.

**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.

**Certain Requirement of AD 98-06-07**

**Airplane Flight Manual (AFM) Revision**

- (g) Within 72 hours after March 27, 1998 (the effective date of AD 98-06-07), revise the Limitations Section of the FAA-approved AFM to add the following. This may be accomplished by inserting a copy of this AD in the AFM.

## **"LIMITATIONS POWERPLANT and APU LIMITATIONS**

### **OPERATING LIMITS**

- To avoid high fan blade stresses, stabilized operation in the speed range between 60% and 75% Low Pressure Rotational Speed (N1) is not permitted during Ground Operations in Forward or Reverse Thrust, except that passing through this range while increasing or decreasing thrust is permitted.

### **THRUST REVERSER**

Thrust reversers are intended for ground use only. Intentional use of reverse thrust in flight is prohibited. After reverse thrust has been initiated, a full stop landing must be made.

#### **Maximum Reverse Thrust Lever Positions**

Normal Operation:

- The idle detent position shall not be exceeded in normal operation.
- Momentarily exceeding the idle detent position, while selecting idle reverse, is acceptable.

Emergency Operation:

- In case of emergency, the emergency maximum reverse thrust may be used.
- If directional control problems occur, reduce to idle reverse or select forward idle.
- Stabilized operation with the reverse lever in an intermediate position between idle reverse and emergency maximum reverse is prohibited, except (where approved) during Power-Back operations."

Note 1: Fokker Services Manual Change Notification-Operational Documentation (MCNO) No. F100-006, dated November 27, 1997, contains information that pertains to this subject. Rolls-Royce PLC Engine Operating Instruction Manual Reference F-TAY-3RR, revised by transmittal letter No. 13, dated October 15, 1997, also pertains to this subject.

### **New Actions Required by This AD**

#### **Removal of Normal Maximum Detent**

(h) Within 12 months after the effective date of this AD, remove the normal maximum (second) detent for the reverse-thrust control, in accordance with the Accomplishment Instructions of Fokker Service Bulletin SBF100-76-014, Revision 2, dated December 12, 2007. Accomplishing the removal terminates the requirements of paragraph (g) of this AD.

(i) Actions done before the effective date of this AD in accordance with Fokker Service Bulletin SBF100-76-014, dated October 1, 2001; or Revision 1, dated June 1, 2002; are acceptable for compliance with the requirements of paragraph (h) of this AD.

### **AFM Revision**

(j) Concurrently with the requirements of paragraph (h) of this AD, revise the Limitations Section of the Fokker F.28 Mark 0100 AFM to include the following (this may be accomplished by inserting a copy of this AD into the AFM):

#### **"THRUST REVERSERS**

Thrust reversers are intended for ground use only. Intentional use of reverse thrust in flight is prohibited.

The use of Max Reverse thrust is limited to operations on short runways or on runways with a reduced runway surface friction coefficient or in emergency conditions. Max Reverse thrust shall not be used at airspeeds below 60 knots except in emergency conditions.

Reverse thrust selections between Idle Reverse thrust and Max Reverse thrust are prohibited."

Note 2: Fokker Manual Change Notification–Operational Documentation (MCNO) F100-032, Revision 1, dated September 21, 2007, contains information related to the AFM revision required by paragraph (j) of this AD.

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

(k) 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.

### **Related Information**

(l) European Aviation Safety Agency Airworthiness Directive 2008-0089, dated May 13, 2008, also addresses the subject of this AD.

### **Material Incorporated by Reference**

(m) You must use Fokker Service Bulletin SBF100-76-014, Revision 2, dated December 12, 2007, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact 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 June 16, 2009.

Dorr M. Anderson,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2009-13-03 Boeing:** Amendment 39-15942. Docket No. FAA-2009-0556; Directorate Identifier 2009-NM-112-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective July 6, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Boeing Model 747-400 and -400F series airplanes, certificated in any category; Powered by Rolls-Royce RB211 series engines.

**Subject**

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

**Unsafe Condition**

(e) This AD results from a report of automatic retraction of the leading edge flaps during takeoff due to indications transmitted to the flap control unit (FCU) from the thrust reverser control system. The Federal Aviation Administration is issuing this AD to prevent automatic retraction of the leading edge flaps during takeoff, which could result in reduced climb performance and consequent collision with terrain and obstacles or forced landing of the airplane.

**Compliance**

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

**Modification**

(g) Within 60 days after the effective date of this AD: Modify the thrust reverser control system wiring to the FCU in the P414 and P415 panels in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-78A2181, dated June 8, 2009.

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

(h)(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: Douglas Bryant, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6505; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

### **Material Incorporated by Reference**

(i) You must use Boeing Alert Service Bulletin 747-78A2181, dated June 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 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 June 12, 2009.

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



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**2009-13-08 McDonnell Douglas:** Amendment 39-15947. Docket No. FAA-2009-0160; Directorate Identifier 2008-NM-176-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective August 3, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all McDonnell Douglas Model MD-90-30 airplanes, certificated in any category.

**Subject**

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

**Unsafe Condition**

(e) This AD results from a report of cracks found in the right upper aft skin panel of the horizontal stabilizer at the aft inboard corner. We are issuing this AD to detect and correct cracks in the fail-safe structure that may not be able to sustain limit load, which could result in the loss of overall structural integrity of the horizontal stabilizer.

**Compliance**

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

**Inspections**

(g) Except as required by paragraphs (h) and (i) of this AD: At the times specified in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin MD90-55A012, dated September 23, 2008, do an eddy current inspection for cracks of the upper aft skin panels on the left and right sides of the horizontal stabilizer, and do all applicable related investigative and corrective actions, in accordance with the Accomplishment Instructions of the service bulletin.

## **Exceptions to Service Bulletin Specifications**

(h) Where Boeing Alert Service Bulletin MD90-55A012, dated September 23, 2008, specifies a compliance time after the date on the service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

(i) If any crack is found during any inspection required by this AD, and Boeing Alert Service Bulletin MD90-55A012, dated September 23, 2008, specifies to contact Boeing for appropriate action: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

## **Inspections Done According to Multiple Operator Message**

(j) Inspections and corrective actions done before the effective date of this AD are acceptable for compliance with the corresponding requirements of this AD, if done in accordance with Boeing Multiple Operator Message 1-669017091-1, dated November 9, 2007.

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

(k)(1) The Manager, Los Angeles Aircraft Certification Office, FAA, ATTN: Roger Durbin, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5233; fax (562) 627-5210; 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.

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

## **Material Incorporated by Reference**

(l) You must use Boeing Alert Service Bulletin MD90-55A012, dated September 23, 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, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California 90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail [dse.boecom@boeing.com](mailto:dse.boecom@boeing.com); Internet <https://www.myboeingfleet.com>.

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

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

Issued in Renton, Washington, on June 16, 2009.

Dorr M. Anderson,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2009-13-09 Microturbo SA:** Amendment 39-15948.; Docket No. FAA-2009-0510; Directorate Identifier 2009-NE-16-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Microturbo SA Saphir 2 model 016 auxiliary power units (APUs) on which the exhaust thermal insulation has been replaced since January 1, 1995. These APUs are installed on, but not limited to, Dassault Falcon 20 airplanes.

**Reason**

- (d) European Aviation Safety Agency (EASA) AD No. 2009-0100, dated May 4, 2009, states:

Due to a lapse in manufacturing quality control, the exhaust thermal insulation of certain Microturbo SA Saphir 2 model 016 APUs may not meet the approved design standard, and may fail in service. The affected part numbers are 016-33-01 (Inner Thermal Insulation), 016-33-02 (Outer Thermal Insulation), and 016-33-03 (EGT Sensor Thermal Insulation). This condition, if not corrected, could result in rapid deterioration and physical breakdown of the exhaust thermal insulation, leading to loss of insulation efficiency and ultimately exposure of the hot APU exhaust section and risk of fire.

We are issuing this AD to prevent rapid deterioration and physical breakdown of the exhaust thermal insulation, leading to loss of insulation efficiency and ultimately exposure of the hot APU exhaust section and risk of fire.

**Actions and Compliance**

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

### **Initial and Repetitive Inspections**

(1) Within 10 APU operating hours from the effective date of this AD, visually inspect the exhaust thermal insulation for signs of deterioration. Repeat the inspection at intervals not exceeding 10 operating APU hours.

(2) If deterioration is detected, replace the exhaust thermal insulation before operating the APU again. Use paragraphs 2.A. through 2.C.(4)(b) of Microturbo SA Alert Service Bulletin No. 49-11A76, Revision 1, dated September 6, 2007, to do the replacement.

### **Mandatory Terminating Action**

(3) As mandatory terminating action to the repetitive visual inspections required by this AD, replace the exhaust thermal insulation within 50 APU operating hours from the effective date of this AD. Use paragraphs 2.A. through 2.C.(4)(b) of Microturbo SA Alert Service Bulletin No. 49-11A76, Revision 1, dated September 6, 2007, to do the replacement.

### **FAA AD Differences**

(f) None.

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

(g) The Manager, Boston Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

### **Related Information**

(h) Refer to MCAI EASA Airworthiness Directive 2009-0100, dated May 4, 2009, for related information.

(i) Contact Michael Schwetz, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: michael schwetz@faa.gov; telephone (781) 238-7761; fax (781) 238-7170, for more information about this AD.

### **Material Incorporated by Reference**

(j) You must use Microturbo SA Alert Service Bulletin No. 49-11A76, Revision 1, dated September 6, 2007, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Microturbo SA, Technical Publications Department, 8, Chemin du pont de Rupe, BP 62089, 31019 Toulouse Cedex 2, France; telephone (33) (0)5 61 37 55 00; fax (33) (0)5 61 70 74 45.

(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 June 17, 2009.  
Carlos Pestana,  
Acting Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



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**2009-13-10 British Aerospace Regional Aircraft:** Amendment 39-15949; Docket No. FAA-2009-0570; Directorate Identifier 2009-CE-033-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective June 26, 2009.

**Affected ADs**

- (b) This AD affects some of the part numbers used as terminating action for AD 2007-21-17, Amendment 39-15235 (72 FR 60228, October 24, 2007).

**Applicability**

- (c) This AD applies to Model HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes, all serial numbers, certificated in any category.

**Subject**

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

**Reason**

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

BAE systems have been notified by the MLG radius rod manufacturer, APPH Ltd, that a batch of incorrectly manufactured Buffer Springs (part number 184818) had been supplied to their parts distributor and MRO facilities in North America.

There is a risk that any radius rod fitted with one of these incorrectly manufactured Buffer Springs could jam in an unlocked position.

This condition, if not corrected, could result in MLG collapse.

For the reasons described above, this Emergency AD requires the replacement of each affected radius rod with a serviceable unit and allows the installation of the affected radius rods only after the accomplishment of APPH Service Bulletins 1847-32-14 and 1862-32-14.

## **Actions and Compliance**

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

(1) Before further flight, inspect the main landing gear (MLG) radius rod to identify if you have one of the affected part numbers (P/Ns) (P/N 1847/D through 1847/N and 1862/D through 1862/N) installed on the airplane following British Aerospace Jetstream Series 3100 and 3200 Alert Service Bulletin 32-A-JA090640, dated June 2009. If you do not have one of the affected P/Ns installed, then only paragraphs (f)(3) and (f)(4) of this AD apply to you.

(2) If as a result of the inspection required in paragraph (f)(1) of this AD you find one of the affected P/N MLG radius rods installed on the airplane, before further flight, replace the MLG radius rod with one of the following:

(i) A serviceable MLG radius rod that is not in one of the following P/N ranges: 1847/D through 1847/N or 1862/D through 1862/N; or

(ii) An affected P/N MLG radius rod that has already been inspected following APPH Ltd. Service Bulletin 1847-32-14 or 1862-32-14, as applicable, both dated June 2009, and found to be serviceable.

(3) As of June 26, 2009 (the effective date of this AD), do not install an affected part number MLG radius rod unless it has been inspected following APPH Ltd. Service Bulletin 1847-32-14 or 1862-32-14, as applicable, both dated June 2009, and found to be serviceable.

Note 1: The inspection requirements of paragraph (f)(3) above apply to any replacement required per AD 2007-21-17.

(4) Within 30 days after the inspection required in paragraph (f)(1) of this AD, send an Accomplishment (Inspection) Report to BAE Systems following the instructions in paragraph 2.C of British Aerospace Jetstream Series 3100 and 3200 Alert Service Bulletin 32-A-JA090640, dated June 2009. Include the details of any radius rods removed.

## **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, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Taylor Martin, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4138; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

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

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

### **Special Flight Permit**

(h) Under 14 CFR 39.23, we are limiting special flight permits for the purpose of compliance with this AD under the following conditions:

(1) Operate the airplane only with the MLG in the down and verified locked position throughout the entire flight; and

(2) Coordinate additional flight restrictions with British Aerospace Regional Aircraft using the contact information provided in paragraph (j)(2) of this AD.

### **Related Information**

(i) Refer to EASA Emergency AD No. 2009-0121-E, dated June 9, 2009; British Aerospace Jetstream Series 3100 and 3200 Alert Service Bulletin 32-A-JA090640, dated June 2009 (includes an attached Accomplishment Report); and APPH Ltd. Service Bulletins 1847-32-14 and 1862-32-14, both dated June 2009, for related information.

### **Material Incorporated by Reference**

(j) You must use British Aerospace Jetstream Series 3100 and 3200 Alert Service Bulletin 32-A-JA090640, dated June 2009 (includes an attached Accomplishment Report) and APPH Ltd. Service Bulletins 1847-32-14 and 1862-32-14, as applicable, both dated June 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 BAE Systems (Operations) Ltd., Customer Information Department, Prestwick International Airport, Ayrshire, KA9 2RW, Scotland, United Kingdom; telephone: +44 1292 675207; fax: +44 1292 675704; e-mail: RApublications@baesystems.com; Internet: <http://www.baesystems.com/Capabilities/Air/>.

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

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

Issued in Kansas City, Missouri, on June 18, 2009.

James E. Jackson,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service



**2009-14-02 Boeing:** Amendment 39-15951. Docket No. FAA-2008-1071; Directorate Identifier 2008-NM-093-AD.

### **Effective Date**

- (a) This AD becomes effective August 3, 2009.

### **Affected ADs**

- (b) This AD supersedes AD 2002-26-15.

### **Applicability**

(c) This AD applies to Boeing Model 747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747-400, 747-400D, 747-400F, 747SR, and 747SP series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 2008.

### **Unsafe Condition**

(d) This AD results from reports of skin wear damage on airplanes with fewer than 8,000 total flight cycles. In addition, there have been three reports of skin wear damage on airplanes on which Boeing Material Specifications (BMS) 10-86 Teflon-filled coating was applied (terminating action per AD 2002-26-15). We are issuing this AD to detect and correct wear damage and cracks of the fuselage skin in the interface area of the vertical stabilizer seal and fuselage skin in sections 46 and 48, which could cause in-flight depressurization of the airplane.

### **Compliance**

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

### **Requirements of AD 2002-26-15**

### **Inspections for Damage/Corrective Actions**

(f) For airplanes identified in Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002: Prior to the accumulation of 15,000 total flight cycles, or within 1,200 flight cycles after February 10, 2003 (the effective date of AD 2002-26-15), whichever occurs later, perform a detailed inspection to detect evidence of wear damage of the fuselage skin at the interface area of the vertical

stabilizer seal and fuselage skin, per Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002.

(1) If no wear damage of the fuselage skin is detected or any existing blendout is within the structural repair manual (SRM) allowable damage limits: Repeat the detailed inspection at intervals not to exceed 6,000 flight cycles.

(2) If any wear damage of the fuselage skin is detected or any existing blendout exceeds the allowable damage limits specified in the SRM: Before further flight, repair the vertical stabilizer seal interface and refinish the skin with BMS 10-86 Teflon-filled coating, per Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002. Accomplishment of the repair and refinishing is terminating action for the repetitive inspections required by paragraph (f)(1) of this AD.

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."

### **Optional Terminating Action for Paragraph (f) of This AD**

(g) Refinishing the fuselage skin with BMS 10-86 Teflon-filled coating, prior to the effective date of this AD, per Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002, terminates the repetitive inspections required by paragraph (f)(1) of this AD.

### **Previously Accomplished Inspections and Terminating Action**

(h) For airplanes identified in Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002: Inspections and terminating action done before February 10, 2003, per Boeing Service Bulletin 747-53-2192, dated July 21, 1981, are acceptable for compliance with the corresponding actions required by paragraph (f) of this AD, provided BMS 10-86 Teflon-filled coating was used, and the new allowable damage limits specified in Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002, are met.

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

#### **New Repetitive Inspections**

(i) Except as provided by paragraph (j) of this AD: At the applicable times specified in Table 1 of this AD, do the actions specified in paragraphs (i)(1) and (i)(2) of this AD, as applicable. Accomplishing the initial inspection specified in paragraph (i) terminates the requirements of paragraph (f) of this AD.

(1) For all airplanes: Do the actions specified in paragraphs (i)(1)(i) and (i)(1)(ii) of this AD, as applicable.

(i) Do repetitive external detailed inspections for wear damage and cracks of the fuselage skin in the interface area of the vertical stabilizer seal and fuselage skin, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 2008.

(ii) Where a skin repair doubler is present in the interface area of the vertical stabilizer seal and fuselage skin, do a detailed inspection for wear damage and cracks of the surface of the repair doubler.

(2) For airplanes that have reduced skin thickness in section 46 due to blending without reinforcement: Do repetitive external detailed inspections or high frequency eddy (HFEC) current inspections for cracks of the blended area of the fuselage skin, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 2008.

**Table 1 – Compliance Times**

<b>Action</b>	<b>Compliance Time (whichever occurs later)</b>		<b>Repeat Interval (Not to Exceed)</b>
	<b>Threshold</b>	<b>Grace Period</b>	
For actions required by paragraph (i)(1) of this AD	Prior to the accumulation of 20,000 total flight hours since the date of issuance of the original airworthiness certificate or the date of issuance of the original export certificate of airworthiness, or within 7,500 flight hours after the last inspection of this AD, whichever occurs later	Within 6,000 flight hours after the effective date of this AD	7,500 flight hours
For actions required by paragraph (i)(2) of this AD	Prior to the accumulation of 20,000 total flight cycles since the date of issuance of the original airworthiness certificate or the date of issuance of the original export certificate of airworthiness, or within 6,000 flight cycles after the initial blend, whichever occurs later	Within 1,000 flight cycles after the effective date of this AD	1,200 flight cycles for external detailed inspection, or 6,000 flight cycles for HFEC inspection

### **Exception to the Repetitive Inspections**

(j) If corrosion-resistant steel rubstrips are installed in the interface area of the vertical stabilizer seal and fuselage skin: Within the applicable compliance times specified in paragraph (i) of this AD, inspect the fuselage skin using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

### **For No Wear Damage or Cracks Found: Apply Teflon**

(k) If no wear damage or crack is found in the fuselage skin (or skin repair doubler) during any inspection required by paragraph (i) of this AD: Before further flight, apply Boeing Material Specifications (BMS) 10-86 Teflon-filled coating in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 2008.

### **For Any Wear Damage or Crack Found: Applicable Corrective Actions**

(l) If any wear damage or crack is found in the fuselage skin (or skin repair doubler) during any inspections required by paragraph (i) of this AD: Before further flight, after the inspection required by paragraph (i), do the actions specified in paragraphs (l)(1), (l)(2), and (l)(3) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 2008.

- (1) Measure the depth of the wear and record the location.
- (2) Repair any wear damage and any crack.
- (3) Apply BMS 10-86 Teflon-filled coating.

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

(m)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, ATTN: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle ACO, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6437; 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 appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

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

### **Material Incorporated by Reference**

(n) You must use Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002; and Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 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 Boeing Alert Service Bulletin 747-53A2478, Revision 1, dated March 27, 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 Boeing Alert Service Bulletin 747-53A2478, dated February 7, 2002, on February 10, 2003 (68 FR 476, January 6, 2003).

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

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

(5) You may also review copies of the service information 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 June 19, 2009.  
Dorr M. Anderson,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2009-14-08 General Electric Company:** Amendment 39-15958. Docket No. FAA-2009-0121; Directorate Identifier 2008-NE-36-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective August 5, 2009.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to General Electric Company (GE) CF6-80C2B5F turbofan engines with a high-pressure compressor rotor (HPCR) stages 11-14 spool/shaft, part number (P/N) 1703M74G03, installed. These engines are installed on, but not limited to, Boeing 747 series airplanes.

**Unsafe Condition**

(d) This AD results from an internal GE audit that compared the life limited parts certification documentation to the airworthiness limitations section (ALS) of the instructions for continuing airworthiness (ICA). We are issuing this AD to prevent HPCR stages 11-14 spool/shaft fatigue cracks caused by exceeding the life limit, which could result in a possible uncontained failure of the HPCR spool/shaft and damage to the airplane.

**Compliance**

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

**New Reduced Life Limit for the HPCR Stages 11-14 Spool/Shaft**

(f) Remove any CF6-80C2B5F turbofan engine that has an HPCR stages 11-14 spool/shaft, P/N 1703M74G03, before the spool/shaft meets or exceeds the new, reduced life cycle limit of 19,500 cycles.

**Installation Prohibition**

(g) After the effective date of this AD, do not install any CF6-80C2B5F turbofan engine that has an HPCR stages 11-14 spool/shaft, P/N 1703M74G03, that meets or exceeds 19,500 cycles.

### **Alternative Methods of Compliance**

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

### **Special Flight Permits**

(i) Under 14 CFR part 39.23, we are prohibiting special flight permits for this AD.

### **Related Information**

(j) Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Part, Burlington, MA 01803; e-mail: robert.green@faa.gov; telephone (781) 238-7754; fax (781) 238-7199.

### **Material Incorporated by Reference**

(k) None.

Issued in Burlington, Massachusetts, on June 25, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.