



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2009-11**

This electronic copy may be printed and used in lieu of the FAA biweekly paper copy.

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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, 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



**CORRECTION:** [*Federal Register: May 18, 2009 (Volume 74, Number 94)*]; Page 23110;  
[www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)]

**2009-04-06 Boeing:** Amendment 39-15812. Docket No. FAA-2008-0731; Directorate Identifier 2008-NM-058-AD.

### **Effective Date**

- (a) This AD becomes effective April 2, 2009.

### **Affected ADs**

- (b) This AD supersedes AD 2004-16-09.

### **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, except those that have been converted to a Model 747-400 LCF configuration.

### **Unsafe Condition**

(d) This AD results from a report that cracks in oil-canned areas were found during an inspection of the aft pressure bulkhead. We are issuing this AD to detect and correct the propagation of fatigue cracks in the vicinity of oil cans on the web of the aft pressure bulkhead, which could result in rapid decompression of the airplane and overpressurization of the tail section, and consequent loss of control of the airplane.

### **Compliance**

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

Note 1: This AD refers to certain portions of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; and Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008; for inspections and repair information. In addition, this AD specifies requirements beyond those included in Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; and Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. Where the AD and Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; and Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008; differ, the AD prevails.

## **Requirements of AD 2004-16-09, With Reduced Threshold**

### **Initial and Repetitive Inspections**

(f) At the earlier of the times specified in paragraphs (f)(1) and (f)(2) of this AD, perform a detailed inspection of the aft pressure bulkhead for indications of oil cans and previous oil can repairs, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. After the effective date of this AD, Revision 1 must be used.

(1) Prior to the accumulation of 30,000 total flight cycles, or within 1,000 flight cycles after September 13, 2004 (the effective date of AD 2004-16-09), whichever is later.

(2) Prior to the accumulation of 20,000 total flight cycles, or within 1,000 flight cycles after the effective date of this AD, whichever occurs later.

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

(g) If no indication of an oil can is found and no indication of a previous oil can repair is found during the detailed inspection required by paragraph (f) of this AD, repeat the detailed inspection thereafter at intervals not to exceed 2,000 flight cycles.

### **Indication of Oil Can**

(h) If any indication of an oil can is found during the detailed inspection required by paragraph (f) or (g) of this AD, before further flight, perform an eddy current inspection of the web around the periphery of the oil can indication for cracks, as shown in Figure 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. After the effective date of this AD, Revision 1 must be used.

(i) If no crack is found during the eddy current inspection required by paragraph (h) of this AD, do the actions specified in paragraph (i)(1) or (i)(2) of this AD, as applicable.

(1) For the oil can that meets the allowable limits specified in Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008: Repeat the eddy current inspection specified in paragraph (h) of this AD thereafter at intervals not to exceed 1,000 flight cycles. As an option, repair the oil can in accordance with paragraph (i)(2) of this AD.

(2) For the oil can that does not meet the allowable limits specified in Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008: Before further flight, repair the oil can in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. After the effective date of this AD, Revision 1 must be used. If the repair eliminates the oil can, accomplishment of this repair constitutes terminating action for the repetitive eddy current inspection

requirements of paragraph (i)(1) of this AD for that location only. However, the repetitive detailed inspection required by paragraph (g) of this AD is still required. If any oil can remains after the repair, repeat the eddy current inspection specified in paragraph (h) of this AD thereafter at intervals not to exceed 1,000 flight cycles.

### **Indication of Previous Oil Can Repairs**

(j) If any previous oil can repair is found during the detailed inspection required by paragraph (f) or (g) of this AD, before further flight, do a detailed inspection of the web for cracks and oil cans, as shown in Figure 4 or Figure 5, as applicable, of the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. After the effective date of this AD, Revision 1 must be used.

(1) If no crack and no oil can are found, repeat the detailed inspection in accordance with paragraph (g) of this AD.

(2) If any oil can is found, before further flight, do the eddy current inspection for cracks, as shown in Figure 3 of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. After the effective date of this AD, Revision 1 must be used. If no crack is found during the eddy current inspection required by this paragraph, do the actions specified in paragraph (i)(1) or (i)(2) of this AD, as applicable, at the time specified in the applicable paragraph.

### **Repair of Cracks**

(k) If any crack is found during any inspection required by this AD, before further flight, repair in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008. After the effective date of this AD, Revision 1 must be used. If any crack or damage exceeds limits specified in Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008; and Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008; specifies to contact Boeing for appropriate action: Before further flight, repair per a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA; or per data meeting the type certification basis of the airplane approved by a Boeing Company Designated Engineering Representative who has been authorized by the Manager, Seattle ACO, to make such findings; or using a method approved in accordance with the procedures specified in paragraph (m) of this AD. For a repair method to be approved, the approval must specifically reference this AD.

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

(l) As of the effective date of this AD, if any crack or damage is found during any inspection required by this AD, and Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008, specifies to contact Boeing for appropriate action (repair data): Before further flight, repair the crack or damage using a method approved in accordance with the procedures specified in paragraph (m) of this AD.

## **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.

(4) AMOCs approved previously in accordance with AD 2004-16-09 are not approved as AMOCs for the corresponding provisions of paragraph (f) of this AD. They are approved as AMOCs for the corresponding provisions of paragraphs (g), (h), (i), (j), (k), and (l) of this AD.

## **Material Incorporated by Reference**

(n) You must use Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002; or Boeing Alert Service Bulletin 747-53A2482, Revision 1, dated February 21, 2008; as applicable; to perform the actions that are 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 747-53A2482, Revision 1, dated February 21, 2008, in accordance with 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On September 13, 2004 (69 FR 48133, August 9, 2004), the Director of the Federal Register approved the incorporation by reference of Boeing Alert Service Bulletin 747-53A2482, dated October 3, 2002.

(3) 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>; for a copy of this service information.

(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 January 29, 2009.

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



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**2009-08-51 Rolls-Royce Corporation (RRC) (Formerly Allison Engine Company):** Amendment 39-15905. Docket No. FAA-2008-0975; Directorate Identifier 2008-NE-29-AD.

### **Effective Date**

(a) This airworthiness directive (AD) becomes effective May 27, 2009, to all persons except those persons to whom it was made immediately effective by emergency AD 2008-08-51, issued April 10, 2009, which contained the requirements of this amendment.

### **Affected ADs**

(b) This AD supersedes AD 2008-26-06.

### **Applicability**

(c) This AD applies to RRC AE 3007A series turbofan engines with high-pressure turbine (HPT) stage 2 wheels, part number (P/N) 23065892, 23069116, 23069438, 23069592, 23074462, 23074644, 23075345, 23084520, or 23084781, installed. These engines are installed on, but not limited to, Empresa Brasileira de Aeronautica S. A. (EMBRAER) EMB-135 and EMB-145 airplanes.

### **Unsafe Condition**

(d) This AD results from additional reports of cracks in the HPT stage 2 wheels identified from the required inspections in AD 2008-26-06. A revised risk assessment that includes these additional reports indicates we need to require a higher inspection rate. We are issuing this AD to prevent uncontained failure of the HPT stage 2 wheel 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.

### **Eddy Current Inspection or Surface Wave Ultrasonic Test Inspection**

(f) Perform an eddy current inspection (ECI) or surface wave ultrasonic test (SWUT) inspection on each affected wheel by the cycle limit specified in Table 1 of this AD. Use paragraphs 2.A. through 2.C.(4) of RRC Alert Service Bulletin (ASB) AE 3007A-A-72-367, Revision 1, dated April 7, 2009, or use paragraphs 2.A through 2.M.(8) of RRC Service Bulletin (SB) AE 3007A-72-368, Revision 1, dated April 6, 2009, to perform the inspections.

**Table 1–Compliance Times for ECI or SWUT Inspection of the  
HPT Stage 2 Wheels by Cycles-Since-New (CSN)**

<b>For HPT stage 2 wheels with CSN on the effective date of this AD:</b>	<b>Remove or inspect:</b>
17,500 or more	Before the next flight.
15,560 to 17,499	Within 75 cycles-in-service (CIS).
15,000 to 15,559	Within 150 CIS.
14,700 to 14,999	Within 200 CIS.
14,000 to 14,699	Within 250 CIS.
13,580 to 13,999	Within 450 CIS.
12,460 to 13,579	Within 600 CIS.

### **Installation Prohibition**

(g) After the effective date of this AD, don't return to service, any HPT stage 2 wheel that was installed in any RRC AE 3007A series turbofan engine removed from service as a result of paragraph (f) of this AD unless the HPT stage 2 wheel has passed an inspection specified in RRC ASB AE 3007A-A-72-367, Revision 1, dated April 7, 2009 or RRC SB AE 3007A-72-368, Revision 1, dated April 6, 2009.

### **Removal From Service**

(h) After the effective date of this AD, remove from service any HPT stage 2 wheel covered by this AD that has accumulated 22,500 CSN.

(i) After the effective date of this AD, don't install any HPT stage 2 wheel that has 22,500 or more CSN.

### **Credit for Previous Inspections**

(j) HPT stage 2 wheels already inspected and passed using RRC ASB AE 3007A-A-72-367, Revision 1, dated April 7, 2009, or earlier issue; or RRC SB AE 3007A-72-368, Revision 1, dated April 6, 2009, or earlier issue, meet the requirements for the initial inspections specified in paragraph (f) of this AD.

### **Alternative Methods of Compliance**

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

## Special Flight Permits

(l) Under 14 CFR part 39.23, we are limiting the special flight permits for this AD by restricting the flight to essential flight crew only.

## Related Information

(m) Contact Kyri Zaroyiannis, Aerospace Engineer, Chicago Aircraft Certification Office, Small Airplane Directorate, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; e-mail: kyri.zaroyiannis@faa.gov; telephone (847) 294-7836; fax (847) 294-7834, for more information about this AD.

## Material Incorporated by Reference

(n) You must use the service information specified in Table 2 of this AD to perform the inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in Table 2 of this AD in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Rolls-Royce Corporation, P.O. Box 420, Indianapolis, IN 46206; telephone (317) 230-3774; fax (317) 230-8084; e-mail: indy.pubs.services@rolls-royce.com. 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 2—Incorporation by Reference**

<b>Rolls-Royce Corporation service information No.</b>	<b>Page</b>	<b>Revision</b>	<b>Date</b>
Alert Service Bulletin AE 3007A–A–72–367	ALL	1	April 7, 2009.
Total pages: 6			
Service Bulletin AE 3007A–72–368	ALL	1	April 6, 2009.
Total pages: 22			

Issued in Burlington, Massachusetts, on May 4, 2009.

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



**CORRECTION:** [*Federal Register: May 18, 2009 (Volume 74, Number 94)*]; Page 23109;  
[www.access.gpo.gov/su\\_docs/aces/aces140.html](http://www.access.gpo.gov/su_docs/aces/aces140.html)]

**2009-10-01 Pratt & Whitney:** Amendment 39-15896. Docket No. FAA-2006-23742; Directorate Identifier 2005-NE-53-AD.

### **Effective Date**

- (a) This airworthiness directive (AD) becomes effective June 9, 2009.

### **Affected ADs**

- (b) This AD supersedes AD 2007-17-21, Amendment 39-15180.

### **Applicability**

(c) This AD applies to Pratt & Whitney (PW) JT9D-7R4G2, -7R4E1, -7R4E4, and -7R4H1 series turbofan engines. These engines are installed on, but not limited to, Boeing 747-200, -300, 767-200, and Airbus A300-600 and A310-300 series airplanes.

### **Unsafe Condition**

(d) This AD results from the manufacturer identifying additional part number (P/N) air seal assemblies that are affected by the unsafe condition. We are issuing this AD to prevent uncontained failure of the 2nd stage high-pressure turbine (HPT) air seal assembly, leading to engine in-flight shutdown and damage to the airplane.

### **Compliance**

(e) You are responsible for having the actions required by this AD performed at the next HPT module exposure after the effective date of this AD, unless the actions have already been done.

(f) At the next HPT module exposure, remove reduced cooling flow 2nd stage HPT vane assemblies P/Ns: 797282, 796972, 800082, 800072, 803182, 803282, and 822582, installed in 2nd stage HPT vane cluster assemblies: P/Ns 797592, 797372, 799872, 799782, and 822572.

(g) For 2nd stage HPT air seals that are installed in engines that had a reduced cooling flow HPT vane assembly removed as specified in (f) of this AD, do the following:

(1) Perform a onetime visual inspection of the 2nd stage HPT air seal assembly. Information on the visual inspection can be found in the JT9D-7R4 engine manual, Section 72-51-22, Inspection/Check-01, paragraphs 1.D.(1), 1.D.(4), and 1.D.(6). (2) Perform a fluorescent penetrant

inspection (FPI) of the 2nd stage HPT air seal assembly for cracks. Information on the FPI can be found in the JT9D-7R4 engine manual, Section 72-51-00, Inspection/Check-03.

### **Definition**

(h) For the purpose of this AD, we define an HPT module exposure as removing the 1st stage HPT rotor or the 2nd stage HPT rotor from the HPT case.

### **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) Pratt & Whitney Alert Service Bulletin JT9D-7R4-A72-596, dated September 15, 2005, contains information for modifying the reduced cooling flow 2nd stage HPT vane assemblies. 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.

(k) Contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: mark.riley@faa.gov; telephone (781) 238-7758; fax (781) 238-7199, for more information about this AD.

### **Material Incorporated by Reference**

(l) None.

Issued in Burlington, Massachusetts, on April 23, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



**FAA  
Aircraft Certification Service**

**AIRWORTHINESS DIRECTIVE**

[www.faa.gov/aircraft/safety/alerts/](http://www.faa.gov/aircraft/safety/alerts/)  
[www.gpoaccess.gov/fr/advanced.html](http://www.gpoaccess.gov/fr/advanced.html)

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**2009-10-05 Bombardier, Inc. (Formerly Canadair):** Amendment 39-15900. Docket No. FAA-2009-0428; Directorate Identifier 2009-NM-053-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all Bombardier Model CL-600-2B19 (Regional Jet series 100 and 440) airplanes, certificated in any category, with serial numbers (S/Ns) 7003 and later, equipped with inboard flap actuators part number (P/N) 601R93101-21 (Eaton P/N 852D100-21) or P/N 601R93101-25 (Eaton P/N 852D100-25).

**Subject**

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

**Reason**

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

"A number of Flap Actuators with P/N [part number] 601R93101-21 and 601R93101-25 were identified as having pinion gears that did not have acceptable certificates of conformance from the supplier. This condition could result in flap failure. To correct this, operators are required to replace the Inboard Flap Actuators that are non-conforming."

Endurance testing conducted at Eaton Aerospace with representative discrepant gears predicted a 3,000 flight cycle life limit for the affected actuators. Fleet leaders with suspect installed actuators are rapidly approaching this threshold. Failure of the flap actuator pinion gear set could cause the right or left inboard panel to disconnect, which could result in flap asymmetry and consequent reduced controllability of the airplane.

## **Actions and Compliance**

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

(1) Within 100 flight cycles after the effective date of this AD: Inspect the serial number of each of the flap actuators having P/N 601R93101-21 and P/N 601R93101-25 installed on the airplane. If the serial number of the inspected actuator is listed in paragraph (f)(1)(i) or (f)(1)(ii) of this AD, before further flight, replace the flap actuator with an actuator that has a serial number not listed in paragraph (f)(1)(i), (f)(1)(ii), or (f)(2) of this AD, in accordance with Section 27-53-01 of Bombardier (Canadair) Regional Jet Aircraft Maintenance Manual (AMM), CSP A-001, Revision 40, dated September 10, 2008. If any of the serial numbers found have a suffix "A," replacement is not required. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the flap actuator can be conclusively determined from that review.

(i) For P/N 601R93101-21: Serial numbers 7772, 7773, 7774, 7775, 7776, 7778, 7779, 7780, 7781, 7782, 7784, 7786, 7787, 7788, 7790, 7791, 7793, 7797, 7798, 7799, 7801, 7802, 7803, 7804, 7805, 7806, 7807, 7808, 7810, 7813, 7815, 7816, 7817, 7818, 7819, 7820, 7821, 7825, 7826, 7827, 7828, and 7829.

(ii) For P/N 601R93101-25: Serial numbers 7783 and 7796.

Note 1: Replacing an existing flap actuator P/N 601R93101-21 with a P/N 601R93101-25 that does not have a serial number listed in paragraph (f)(2) of this AD also satisfies the requirements of paragraph (f)(1) of this AD.

(2) Within 500 flight cycles after the effective date of this AD: Inspect the serial number of each of the flap actuators P/N 601R93101-25 installed on the airplane. If the serial number is 3278, 3401, 3512, 3526, 3597, 3599, 3606, 3738, 3806, 3861, 4066, 4284, 4315, 4401, 4499, 4538, 4582, 4658, 4979, 5007, 5094, 6422, 6969, or 7867, before further flight, replace the flap actuator having P/N 601R93101-25 with a flap actuator having a serial number not identified in this paragraph or paragraph (f)(1) of this AD. Do the replacement in accordance with Section 27-53-01 of Bombardier (Canadair) Regional Jet AMM, CSP A-001, Revision 40, dated September 10, 2008. If any of the serial numbers found have a suffix "B," replacement is not required. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the flap actuator can be conclusively determined from that review.

(3) As of the effective date of this AD, replacement of a flap actuator having P/N 601R93101-21 or 601R93101-25 with a serial number identified in paragraph (f)(1)(i), (f)(1)(ii), or (f)(2) of this AD is not allowed on any airplane unless the serial number of the actuator listed in paragraph (f)(1)(i) and (f)(1)(ii) of this AD is identified with suffix "A," and the serial number of the actuator listed in paragraph (f)(2) is identified with suffix "B."

Note 2: Serial number suffix "A" or "B" indicates that a conforming gear set has been installed.

## **FAA AD Differences**

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

## Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Christopher Alfano, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York Aircraft Certification Office, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7340; fax (516) 794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

## Related Information

(h) Refer to TCCA Canadian Airworthiness Directive CF-2009-13, dated March 26, 2009; and Bombardier (Canadair) Regional Jet AMM, CSP A-001, Revision 40, dated September 10, 2008; for related information.

## Material Incorporated by Reference

(i) You must use Section 27-53-01 of Bombardier (Canadair) Regional Jet AMM, CSP A-001, Revision 40, dated September 10, 2008, as applicable, unless the AD specifies otherwise. Bombardier (Canadair) Regional Jet AMM, CSP A-001, Revision 40, dated September 10, 2008, contains the following effective pages:

<b>List of Effective Pages:</b>			
<b>Page Title/ Description</b>	<b>Page Number(s)</b>	<b>Revision Number</b>	<b>Date Shown on Page(s)</b>
AMM Title Page	None shown	40	September 10, 2008
Organization of Manual	1-3	None shown*	September 10, 2008
Record of Revisions	1	40	September 10, 2008
Chapter 27 List of Effective Pages	1-30	None shown*	September 10, 2008
Section 27-53-01	401, 410-416	None shown*	September 10, 2008
	402-410	None shown*	April 20, 2004

(\* The revision level of this document is specified only on the title page and Record of Revisions page.)

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

(2) 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.

(3) 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 April 30, 2009.

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



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**2009-10-06 Boeing:** Amendment 39-15901. Docket No. FAA-2009-0135; Directorate Identifier 2008-NM-170-AD.

**Effective Date**

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

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Boeing Model 747-400 and 747-400D series airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin 747-53A2688, dated August 21, 2008.

**Subject**

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

**Unsafe Condition**

(e) This AD results from reports of cracks found in the Section 41 upper deck floor beam upper chords. We are issuing this AD to detect and correct cracks in these chords, which could become large and cause the floor beams to become severed and result in rapid decompression or reduced controllability of the airplane.

**Compliance**

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

**Inspections and Corrective Actions**

(g) Except as required by paragraphs (h) and (i) of this AD: At the applicable times in paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2688, dated August 21, 2008 ("the service bulletin"), do an inspection (open-hole or surface high frequency eddy current) to detect cracks in the floor panel attachment fastener holes of the Section 41 upper deck floor beam upper chords, and do applicable related investigative and corrective actions, by accomplishing all the applicable actions specified in the Accomplishment Instructions of the service bulletin. Repeat the inspections thereafter at the applicable times specified in paragraph 1.E., "Compliance," of the service bulletin.

(h) If any crack is found during any inspection required by paragraph (g) of this AD, and Boeing Alert Service Bulletin 747-53A2688, dated August 21, 2008, specifies to contact Boeing for appropriate action: Before further flight, repair the crack using a method approved in accordance with the procedures specified in paragraph (j) of this AD.

(i) Where Boeing Alert Service Bulletin 747-53A2688, dated August 21, 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.

### **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: Ivan Li, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6437; fax (425) 917-6590.

(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 747-53A2688, dated August 21, 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 May 1, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



**2009-10-07 Airbus:** Amendment 39-15902. Docket No. FAA-2009-0433; Directorate Identifier 2009-NM-003-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

- (c) This AD applies to Airbus Model A380-841, -842 and -861 airplanes, certificated in any category, all serial numbers.

**Subject**

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

**Reason**

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

"During the flight test campaign of the A380-861 model (Engine Alliance powered), some cracks were found on the Movable Flap Track Fairing number 6 (MFTF6).

"These cracks were located at the pivot attachment support-ring and at the

"U-frame in the attachment area to aft-kinematic. In addition, delamination has been observed within the monolithic Carbon Fibre Reinforced Plastic (CFRP) structure around the pivot support-ring.

"This condition, if not corrected, could lead to in-flight loss of the MFTF6, potentially resulting in injuries to persons on the ground.

"To prevent the risk of a MFTF6 detachment, this Airworthiness Directive (AD) requires an inspection program in order to detect cracks [and delamination] before they become critical and in case of findings to replace the MFTF6 [with a new or serviceable part]."

## **Actions and Compliance**

(f) Unless already done, do the following:

(1) At the applicable time specified in paragraph (f)(1)(i) or (f)(1)(ii) of this AD for the left- and right-hand MFTF6, do a special detailed (ultrasonic and high-frequency eddy current) inspection of the filet radii of pivot supports, monolithic carbon fibre reinforced plastic structures, and radii of U-Frame, and a general visual inspection of MFTF6, for cracking and delamination, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A380-57-8014, dated November 21, 2008.

(i) For Model A380-841 and -842 airplanes: Before the MFTF6 has accumulated 500 total flight cycles since its first installation on an airplane, or within 30 flight hours after the effective date of this AD, whichever occurs later.

(ii) For Model A380-861 airplanes: Before the MFTF6 has accumulated 100 total flight cycles since its first installation on an airplane, or within 30 flight hours after the effective date of this AD, whichever occurs later.

(2) If no cracking and no delamination are detected during any inspection required by paragraph (f)(1) of this AD, repeat the inspections required by paragraph (f)(1) of this AD thereafter at intervals not to exceed the applicable time specified in paragraph (f)(2)(i) or (f)(2)(ii) of this AD.

(i) For Model A380-841 and -842 airplanes: 50 flight cycles.

(ii) For Model A380-861 airplanes: 10 flight cycles.

(3) If any cracking or delamination is found during any inspection required by paragraph (f)(1) or (f)(2) of this AD, before further flight, replace the MFTF6 with a new or serviceable part, in accordance with the Accomplishment Instructions of Airbus Service Bulletin A380-57-8014, dated November 21, 2008, and repeat the inspections specified in paragraph (f)(1) of this AD at the applicable time defined in 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, 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 appropriate principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

### **Related Information**

(h) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2008-0216, dated December 9, 2008; and Airbus Service Bulletin A380-57-8014, dated November 21, 2008; for related information.

### **Material Incorporated by Reference**

(i) You must use Airbus Service Bulletin A380-57-8014, including Appendix 01, dated November 21, 2008, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Airbus SAS-EANA (Airworthiness Office); 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 562 110 253; Fax +33 562 110 307; e-mail [account.airworth-A380@airbus.com](mailto:account.airworth-A380@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 May 1, 2009.  
Stephen P. Boyd,  
Acting Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-10-08 Pratt & Whitney:** Amendment 39-15903. Docket No. FAA-2008-1131; Directorate Identifier 2008-NE-37-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Pratt & Whitney models PW2037, PW2037(M), and PW2040 turbofan engines with high-pressure turbine (HPT) 2nd stage hubs that have previously been exposed to Pratt & Whitney cleaning procedure SPOP 10 or SPOP 9 or equivalent procedure. These engines are installed on, but not limited to, Boeing 757-200 and 757-300 airplanes.

**Unsafe Condition**

(d) This AD results from an uncontained release of HPT 2nd stage blades and blade retention lugs. We are issuing this AD to remove nonconforming HPT 2nd stage hubs, which could result in an uncontained release of turbine blades and blade retention lugs, and damage to the airplane.

**Compliance**

(e) You are responsible for having the actions required by this AD performed at the next HPT overhaul, unless the actions have already been done.

**Onetime Optical Comparator Inspection (OCI) of HPT 2nd Stage Hubs**

(f) Perform a onetime optical comparator inspection of the HPT 2nd stage hubs after a fluorescent penetrant inspection and all shop cleaning processes have been completed. Pratt & Whitney Alert Service Bulletin No. PW2000 A72-734, dated November 3, 2008, contains information about the optical comparator inspection.

- (g) Remove from service any hubs that fail the optical comparator inspection.

## **Definition**

(h) This AD defines an HPT overhaul as when the HPT is at its piece-part level.

## **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 Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: mark.riley@faa.gov; telephone (781) 238-7758, fax (781) 238-7199, for more information about this AD.

(k) Pratt & Whitney Alert Service Bulletin No. PW2000 A72-734, dated November 3, 2008, contains information about the optical comparator inspection.

## **Material Incorporated by Reference**

(l) None.

Issued in Burlington, Massachusetts, on May 4, 2009.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.



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**2009-10-10 Bombardier Inc. (Formerly Canadair):** Amendment 39-15906. Docket No. FAA-2009-0448; Directorate Identifier 2009-NM-052-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective May 29, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Bombardier Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, certificated in any category, serial numbers 10003 through 10260 inclusive; Model CL-600-2D15 (Regional Jet Series 705) airplanes and Model CL-600-2D24 (Regional Jet Series 900) airplanes, certificated in any category, serial numbers 15001 through 15095 inclusive.

**Subject**

(d) Air Transport Association (ATA) of America Code 21: Air Conditioning.

**Reason**

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

During testing, it was discovered that when the outflow valve (OFV) manual mode connector is not connected, the manual mode motor and altitude limitation are not properly tested. Consequently, a disconnect of the OFV manual mode and/or a related wiring failure could potentially result in a dormant loss of several CPC [cabin pressure control] backup/safety functions, including OFV manual control, altitude limitation, emergency depressurization and smoke clearance. This deficiency is applicable to CPC units, Part Number (P/N) GG670-98002-3 and -5, and CPCP [cabin pressure control panel], Part Number GG670-98001-5, -7 and -9.

This [Canadian] directive mandates an interim repetitive check of the OFV manual mode motor and altitude limitation functions, followed by modification (software update) of the CPC units and the CPCP.

The corrective action for findings of improper OFV manual mode motor and altitude limitation functions is replacing the valve with a new or serviceable valve.

## **Actions and Compliance**

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

(1) Within 450 flight hours after the effective date of this AD, inspect the OFV for proper operation of the manual mode motor and altitude limitation functions, in accordance with Part A of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006 ("the service bulletin"). If the OFV manual mode motor or altitude limitation functions do not operate properly, before further flight, do the actions specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD. Repeat the inspection thereafter at intervals not to exceed 450 flight hours. Accomplishing the actions specified in paragraph (f)(3) of this AD terminates the requirements of this paragraph.

(i) Make sure that the electrical connectors, MPE23P1 and MPE23P2, are connected to the OFV.

(ii) Repeat the inspection of the OFV for proper operation of the manual mode motor and altitude limitation functions, in accordance with Part A of the service bulletin. If the OFV manual mode motor or altitude limitation functions do not operate properly, before further flight, replace the OFV with a new or serviceable valve in accordance with Tasks 21-32-01-000-801 and 21-32-01-400-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1, Revision 28, dated January 20, 2009, and do the inspection of the OFV specified in paragraph (f)(1) of this AD.

(2) Prior to accomplishing paragraph (f)(3) of this AD: Install modified CPC units, Part Number GG670-98002-7, in accordance with Part B of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006.

(3) Installing modified CPCPs, Part Number GG670-98001-11, in accordance with Part C of the Accomplishment Instructions of Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006, terminates the requirements of paragraph (f)(1) of this AD.

## **FAA AD Differences**

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

(1) The MCAI and Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006, do not describe corrective actions for findings of improper OFV manual mode motor and altitude limitation functions. This AD requires the actions in paragraphs (f)(1)(i) and (f)(1)(ii) of this AD, which includes replacing the valve if the OFV manual mode motor or altitude limitation functions do not operate properly.

(2) This AD does not require the software update of the CPC units specified in Part 2 of the MCAI, and the software update of the CPCP specified in Part 3 of the MCAI. The planned compliance times for those actions would allow enough time to provide notice and opportunity for prior public comment on the merits of those actions. Therefore, we are considering further rulemaking to address this issue.

## **Other FAA AD Provisions**

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Fabio Buttitta, Aerospace Engineer, Airframe and Mechanical Systems Branch, ANE-171, FAA, New York ACO, 1600

Stewart Avenue, Suite 410, Westbury, New York 11590; telephone (516) 228-7303; fax (516) 794-5531. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

### Related Information

(h) Refer to MCAI Canadian Airworthiness Directive CF-2009-08, dated March 9, 2009; Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006; and Tasks 21-32-01-000-801 and 21-32-01-400-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1, Revision 28, dated January 20, 2009; for related information.

### Material Incorporated by Reference

(i) You must use Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006; Task 21-32-01-000-801 of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1, Revision 28, dated January 20, 2009; and Task 21-32-01-400-801, of the Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1, Revision 28, dated January 20, 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. The optional terminating actions, if done, must be done in accordance with Bombardier Alert Service Bulletin A670BA-21-022, dated August 3, 2006. Bombardier CRJ Regional Jet Series Aircraft Maintenance Manual, CSP B-001, Part 2, Volume 1, Revision 28, dated January 20, 2009, contains the following effective pages:

<b>List of Effective Pages:</b>			
<b>Page Title/Description</b>	<b>Page Number(s)</b>	<b>Revision Number</b>	<b>Date Shown on Page(s)</b>
Title Page	None shown	28	January 20, 2009
List of Chapters	1-2	28	January 20, 2009
Chapter 21 List of Effective Pages	1-39	None shown*	January 20, 2009
Task 21-32-01-000-801	401-403	None shown*	July 20, 2008
Task 21-32-01-400-801	408-411	None shown*	July 20, 2008

(\* The revision level is specified only on the title page and List of Chapters pages of this 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 Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail [thd.crj@aero.bombardier.com](mailto:thd.crj@aero.bombardier.com); Internet <http://www.bombardier.com>.

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

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

Issued in Renton, Washington, on May 6, 2009.

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



**2009-10-11 Airbus:** Amendment 39-15907. Docket No. FAA-2009-0449; Directorate Identifier 2008-NM-034-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective June 4, 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, all serial numbers, on which a carbon fiber-reinforced plastic (CFRP) rudder part number (PN) A55471500 series is fitted.

**Subject**

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

**Reason**

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

Based on some recent in-service findings for fluid ingress and/or inner skin disbond damage on rudders which could result in reduced structural integrity of the rudder, AIRBUS decided to introduce some further structural inspections to specific rudder areas[.]

**Actions and Compliance**

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

(1) Within 500 flight cycles or 6 months after the effective date of this AD, whichever occurs first: Perform a special detailed one-time inspection to detect damage in the areas of the rudder hoisting points and trailing edge screw, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-55-3037, dated October 11, 2007; or Airbus Mandatory Service Bulletin A340-55-4033, dated October 11, 2007; as applicable. Do all applicable corrective actions at the times specified in and in accordance with Airbus Mandatory Service Bulletin A330-55-3037, dated October 11, 2007; or Airbus Mandatory Service Bulletin A340-55-4033, dated October 11, 2007; as applicable.

(2) Submit a report of the findings of the inspection required by paragraph (f)(1) of this AD to Airbus in accordance with the instructions of Appendix 01 of Airbus Mandatory Service Bulletin A330-55-3037, dated October 11, 2007; or Airbus Mandatory Service Bulletin A340-55-4033, dated October 11, 2007; as applicable; at the applicable time specified in paragraph (f)(2)(i) or (f)(2)(ii) of this AD.

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

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

(3) Within 500 flight cycles or 6 months after the effective date of this AD, whichever occurs first: Perform a special detailed inspection along the rudder z-profile to detect inner skin disbond damage, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-55-3038, dated November 7, 2007; or Airbus Mandatory Service Bulletin A340-55-4034, dated November 7, 2007; as applicable. Do all applicable related investigative and corrective actions at the times specified in and in accordance with Airbus Mandatory Service Bulletin A330-55-3038, dated November 7, 2007; or Airbus Mandatory Service Bulletin A340-55-4034, dated November 7, 2007; as applicable.

(4) Submit a report of the findings of the inspection required by paragraph (f)(3) of this AD to Airbus in accordance with the instructions of Airbus Mandatory Service Bulletin A330-55-3038, dated November 7, 2007; or Airbus Mandatory Service Bulletin A340-55-4034, dated November 7, 2007; as applicable; at the applicable time specified in paragraph (f)(4)(i) or (f)(4)(ii) of this AD.

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

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

(5) As of the effective date of this AD, no person may install a part number (P/N) A55471500 series rudder on an aircraft as a replacement part, unless it has been inspected and, as applicable, repaired in accordance with the instructions of Airbus Mandatory Service Bulletin A330-55-3037, dated October 11, 2007, or Airbus Mandatory Service Bulletin A340-55-4033, dated October 11, 2007; and Airbus Mandatory Service Bulletin A330-55-3038, dated November 7, 2007, or Airbus Mandatory Service Bulletin A340-55-4034, dated November 7, 2007.

## **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, 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. The AMOC approval letter must specifically reference this AD.

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

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

**Related Information**

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2008-0012, dated January 14, 2008; and the service bulletins listed in Table 1 of this AD; for related information.

**Table 1 – Service Bulletins**

<b>Airbus Mandatory Service Bulletin –</b>	<b>Dated –</b>
A330-55-3037	October 11, 2007
A330-55-3038	November 7, 2007
A340-55-4033	October 11, 2007
A340-55-4034	November 7, 2007

**Material Incorporated by Reference**

(i) You must use the service information contained in Table 2 of this AD to do the actions required by this AD, 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; fax +33 5 61 93 45 80, e-mail airworthiness.A330-A340@airbus.com; Internet <http://www.airbus.com>.

(3) You may review copies of the service information that is incorporated by reference 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 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 2 – Material incorporated by reference**

<b>Document</b>	<b>Date</b>
Airbus Mandatory Service Bulletin A330-55-3037, excluding Appendix 01	October 11, 2007
Airbus Mandatory Service Bulletin A330-55-3038, including Appendix 01	November 7, 2007
Airbus Mandatory Service Bulletin A340-55-4033, excluding Appendix 01	October 11, 2007
Airbus Mandatory Service Bulletin A340-55-4034, including Appendix 01	November 7, 2007

Issued in Renton, Washington, on May 6, 2009.

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



**2009-10-12 Boeing:** Docket No. FAA-2009-0450; Directorate Identifier 2008-NM-182-AD; Amendment 39-15908.

**Effective Date**

(a) This AD becomes effective June 4, 2009.

**Affected ADs**

(b) This AD supersedes AD 2005-16-06.

**Applicability**

(c) This AD applies to the airplanes listed in Table 1 of this AD, certificated in any category.

**Table 1 – Applicability**

<b>Boeing–</b>	<b>As identified in–</b>
Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400F, 747SP, and 747SR series airplanes	Boeing Service Bulletin 747-25-3279, Revision 4, dated December 11, 2008
Model 747-200B, -200C, -300, -400, and -400D series airplanes	Boeing Service Bulletin 747-25-3232, dated July 6, 2000

**Subject**

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

**Unsafe Condition**

(e) This AD results from a report of 30- to 60-second delays in the inflation of escape slides/rafts. We are issuing this AD to prevent actuation delays in the inflation systems of the escape slides/rafts, which could result in delayed or failed deployment of escape slides/rafts during emergency evacuation of an airplane.

**Compliance**

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

## **Restatement of Requirements of AD 2005-16-06**

### **Modification for Upper Deck, Two-Piece Off-Wing, and Door 1, 2, 4, and 5 Slides and Slide/Rafts**

(g) For Model 747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400F, 747SP, and 747SR series airplanes identified in Boeing Service Bulletin 747-25-3279, Revision 1, dated July 11, 2002: Within 36 months after September 13, 2005 (the effective date of AD 2005-16-06), do the actions specified in paragraphs (g)(1) and (g)(2) of this AD, as applicable, in accordance with Boeing Service Bulletin 747-25-3279, Revision 1, dated July 11, 2002; or Revision 4, dated December 11, 2008. After the effective date of this AD, only Revision 4 of Boeing Service Bulletin 747-25-3279 can be used to accomplish the requirements of this paragraph.

(1) Modify the inflation systems of the upper deck and two-piece off-wing escape slides.

(2) Modify the inflation systems of the door 1, 2, 4, and 5 escape slides/rafts, as applicable.

Note 1: Boeing Service Bulletins 747-25-3279, Revision 1, dated July 11, 2002, and 747-25-3279, Revision 4, dated December 11, 2008; refer to Goodrich Service Bulletin 4A3037-25-327, dated November 30, 2001; Goodrich Service Bulletin 4A3056-25-331, dated December 21, 2001; and Goodrich Service Bulletin 4A3221-25-332, dated December 21, 2001; as additional sources of service information for doing the modifications.

### **Modification for Single-Piece Off-Wing Ramp/Slides**

(h) For Model 747-200B, -200C, -300, -400, and -400D series airplanes identified in Boeing Service Bulletin 747-25-3232, dated July 6, 2000: Within 36 months after September 13, 2005, modify the inflation system of the single-piece off-wing escape ramps/slides, in accordance with Boeing Service Bulletin 747-25-3232, dated July 6, 2000.

Note 2: Boeing Service Bulletin 747-25-3232, dated July 6, 2000, refers to Goodrich Service Bulletin 4A3416-25-305, Revision 2, dated October 15, 2001, as an additional source of service information for doing the modification.

### **Parts Installation**

(i) For airplanes identified in paragraph (g) or (h) of this AD: As of September 13, 2005, unless the regulator assembly of the inflation system has been modified in accordance with paragraph (g) or (h) of this AD, as applicable, no person may install on any airplane a regulator assembly with any of the following part numbers (P/Ns): P/N 4A3047, -2, -3, -4, -5, -8, -9, or -10; P/N 4A3194-1, -2, -3, or -4; or P/N 4A3474-3.

### **Credit for Previous Service Bulletin**

(j) Actions done before September 13, 2005, in accordance with Boeing Service Bulletin 747-25-3279, dated May 16, 2002, are acceptable for compliance with the corresponding requirements of paragraph (g) of this AD.

## **New Requirements of This AD**

### **Modification for Upper Deck, Two-Piece Off-Wing, and Door 1, 2, 4, and 5 Slides and Slide/Rafts**

(k) For Model 747SP airplane with the variable number RG162: Within 36 months after the effective date of this AD, do the actions specified in paragraphs (k)(1) and (k)(2) of this AD, in accordance with Boeing Service Bulletin 747-25-3279, Revision 4, dated December 11, 2008.

- (1) Modify the inflation systems of the upper deck and two-piece off-wing escape slides.
- (2) Modify the inflation systems of the door 1, 2, 4, and 5 escape slides/rafts.

### **Actions Accomplished According to Previous Issue of Service Bulletin**

(l) Actions accomplished before the effective date of this AD according to Boeing Service Bulletin 747-25-3279, Revision 2, dated July 26, 2006; or Revision 3, dated January 18, 2007; are considered acceptable for compliance with the corresponding actions specified in paragraph (g) of this AD.

(m) Actions accomplished before the effective date of this AD according to Boeing Service Bulletin 747-25-3279, dated May 16, 2002; Revision 1, dated July 11, 2002; Revision 2, dated July 26, 2006; or Revision 3, dated January 18, 2007; are considered acceptable for compliance with the corresponding actions specified in paragraph (k) of this AD.

### **Parts Installation for RG162**

(n) For Model 747SP airplane with the variable number RG162: As of the effective date of this AD, unless the regulator assembly of the inflation system has been modified in accordance with paragraph (k) of this AD, no person may install on that airplane a regulator assembly with any of the following part numbers (P/Ns): P/N 4A3047, -2, -3, -4, -5, -8, -9, or -10; P/N 4A3194-1, -2, -3, or -4; or P/N 4A3474-3.

### **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: Andrew Guion, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6428; fax (425) 917-6590.

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

(3) AMOCs approved previously in accordance with AD 2005-16-06 are approved as AMOCs for the corresponding provisions of this AD.

## Material Incorporated by Reference

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

**Table 2 – All material incorporated by reference**

<b>Boeing Service Bulletin –</b>	<b>Revision –</b>	<b>Dated –</b>
747-25-3232	Original	July 6, 2000
747-25-3279	1	July 11, 2002
747-25-3279	4	December 11, 2008

(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>Boeing Service Bulletin –</b>	<b>Revision –</b>	<b>Dated –</b>
747-25-3279	4	December 11, 2008

(2) The Director of the Federal Register previously approved the incorporation by reference of the service information contained in Table 4 of this AD on September 13, 2005 (70 FR 46067, August 9, 2005).

**Table 4 – Material previously incorporated by reference**

<b>Boeing Service Bulletin –</b>	<b>Revision –</b>	<b>Dated –</b>
747-25-3232	Original	July 6, 2000
747-25-3279	1	July 11, 2002

(3) For Boeing 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>. For Goodrich service information identified in this AD, contact Goodrich Corporation, Aircraft Interior Products, ATTN: Technical Publications, 3414 South Fifth Street, Phoenix, Arizona 85040; telephone 602-243-2270; e-mail [george.yribarren@goodrich.com](mailto:george.yribarren@goodrich.com); Internet <http://www.goodrich.com/TechPubs>.

(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 May 6, 2009.  
Ali Bahrami,  
Manager, Transport Airplane Directorate,  
Aircraft Certification Service.



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**2009-10-13 Saab AB, Saab Aerosystems:** Amendment 39-15909. Docket No. FAA-2009-0035; Directorate Identifier 2008-NM-096-AD.

**Effective Date**

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

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to Saab AB, Saab Aerosystems Model 340A (SAAB/SF340A) airplanes, serial numbers (S/Ns) 004 through 159 inclusive, and Model SAAB 340B airplanes, S/Ns 160 through 459 inclusive; certificated in any category.

**Subject**

- (d) Air Transport Association (ATA) of America Code 71: Powerplant.

**Reason**

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

Field experiences have revealed cracks in the frames and closing angle on the forward engine cowl door NS STA [nacelle station] 203 and 250.

In case of a damaged frame and/or closing angle, the forward engine cowl door can loosen during flight and depart from the aircraft.

This AD is issued to require a detailed inspection to find out if there are any cracks [or deformations or wear damage] in the frames and/or the closing angles. The inspection is on four points on each of the forward engine cowl doors.

The corrective action depends on if the crack, deformation, or wear damage is within or outside certain defined limits, and includes doing a repair either in accordance with the specified service information, or contacting Saab for repair instructions and doing the repair.

## **Actions and Compliance**

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

(1) Within 1,000 flight hours after the effective date of this AD, do a detailed inspection for cracking, deformation, or wear damage of the frame and closing angle on the forward engine cowl door, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-71-060, dated February 8, 2008.

(2) If any crack, deformation, or wear damage is found during the inspection required by paragraph (f)(1) of this AD, before further flight, do all applicable corrective actions in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-71-060, dated February 8, 2008.

(3) Submit a report of the findings of the inspection required by paragraph (f)(1) of this AD to Saab at the address specified in Saab Service Bulletin 340-71-060, dated February 8, 2008. Submit the report at the applicable time specified in paragraph (f)(3)(i) or (f)(3)(ii) of this AD. The report must include the information specified in the "Inspection Result Formula" form in the service bulletin.

(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 accomplished before the effective date of this AD: Submit the report within 30 days after the effective date of this AD.

## **FAA AD Differences**

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

## **Other FAA AD Provisions**

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

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

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

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

**Related Information**

(h) Refer to MCAI European Aviation Safety Agency (EASA) Airworthiness Directive 2008-0069, dated April 11, 2008; and Saab Service Bulletin 340-71-060, dated February 8, 2008; for related information.

**Material Incorporated by Reference**

(i) You must use Saab Service Bulletin 340-71-060, dated February 8, 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 Saab Aircraft AB, SAAB Aerosystems, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; e-mail [saab2000.techsupport@saabgroup.com](mailto:saab2000.techsupport@saabgroup.com); Internet <http://www.saabgroup.com>.

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

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

Issued in Renton, Washington, on May 6, 2009.

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



**2009-11-02 CFM International S.A.:** Amendment 39-15912. Docket No. FAA-2008-1245; Directorate Identifier 2008-NE-27-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective June 23, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to CFM International S.A. CFM56-2, CFM56-3, CFM56-5A, CFM56-5B, CFM56-5C, and CFM56-7B series turbofan engines with a high-pressure compressor (HPC) 4-9 spool that has a part number (P/N) and serial number (SN) specified in Table 1 of this AD, installed. These engines are installed on, but not limited to, Airbus A319, A320, and A340 airplanes and Boeing 737 airplanes.

**Table 1—HPC 4-9 Spools by P/N and SN**

<b>HPC 4-9 Spool P/N</b>	<b>HPC 4-9 Spool SN</b>
9513M93G08	MPON1641
1590M29G01	GWN0087D
1590M29G01	GWN00MG2
1590M29G01	GWN011LG
1590M29G01	GWN01285
1590M29G01	GWN021JC
1590M29G01	GWNFY923
1590M29G01	GWNFY924
1590M29G01	GWNPA756
1590M29G01	GWNPG015
1590M29G01	GWNWC515
1590M29G01	GWNWR523
1590M29G01	GWNWT631

1590M29G01	GWNYC495
1588M89G03	GWN03K1R
1588M89G03	GWN03N61
1588M89G03	GWN03N6C
1588M89G03	GWN040L9
1588M89G03	GWN0468N
1588M89G03	GWN05AMO
1277M97G02	GWNE1298
1277M97G02	GWNE1564
1277M97G02	GWNJ7891
1277M97G02	GWNT4187
9513M93G11	GWNB3373
1358M94G01	GWNU0169

### **Unsafe Condition**

(d) This AD results from reports of certain HPC 4-9 spools that Propulsion Technology LLC (PTLLC) improperly repaired and returned to service. We are issuing this AD to prevent cracking of the HPC 4-9 spool, which could result in possible uncontained failure of the spool 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.

### **Removing the HPC 4-9 Spool**

(f) Remove HPC 4-9 spools from service that have a P/N and S/N listed in Table 1 of this AD before accumulating 8,900 cycles-since-repair at PTLLC or within 1,100 cycles from the effective date of this AD, which ever occurs later.

### **Installation Prohibition**

(g) After the effective date of this AD, do not install any engine with an HPC 4-9 spool that has a P/N and SN specified in Table 1 of this AD.

### **Alternative Methods of Compliance**

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

### **Related Information**

(i) Contact Stephen K. Sheely, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: [stephen.k.sheely@faa.gov](mailto:stephen.k.sheely@faa.gov); telephone (781) 238-7750; fax (781) 238-7199, for more information about this AD.

### **Material Incorporated by Reference**

(j) None.

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



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**2009-11-03 Lockheed:** Amendment 39-15913. Docket No. FAA-2009-0462; Directorate Identifier 2009-NM-063-AD.

**Effective Date**

(a) This airworthiness directive (AD) is effective June 4, 2009.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all Lockheed Model 382, 382B, 382E, 382F, and 382G series airplanes, certificated in any category.

**Subject**

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

**Unsafe Condition**

(e) This AD results from a report of severe cracking of multiple barrel nuts in the wing station (WS) 220 upper wing joint found during scheduled maintenance. We are issuing this AD to prevent cracking of the barrel nuts in the upper wing joint, engine truss, and rear beam pylon support, which could result in reduced structural integrity of the affected part and consequent detachment of the wing or engine from the airplane.

**Compliance**

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

**Inspection/Replacement if Necessary**

(g) Within 30 days after the effective date of this AD: Do a general visual inspection to identify discrepant barrel nuts in the upper wing joint, engine truss, and rear beam pylon support, in accordance with the Accomplishment Instructions of Lockheed Alert Service Bulletin A382-57-91, Revision 1, dated March 25, 2009. Except as provided by paragraph (h) of this AD, if any discrepant

barrel nut is found, before further flight, replace the barrel nut with a new barrel nut in accordance with the service bulletin.

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

### **Exception to Corrective Action Instructions**

(h) If any discrepant barrel nut is found during the inspection required by this AD, and Lockheed Alert Service Bulletin A382-57-91, Revision 1, dated March 25, 2009, specifies contacting Lockheed for appropriate action: Before further flight, replace the discrepant barrel nut using a method approved by the Manager, Atlanta Aircraft Certification Office (ACO), FAA. For a repair method to be approved by the Manager, Atlanta ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

### **Credit for Actions Done Using Previous Service Information**

(i) Actions done before the effective date of this AD in accordance with Lockheed Alert Service Bulletin A382-57-91, dated March 6, 2009, are acceptable for compliance with the corresponding requirements of this AD.

### **Reporting Not Required**

(j) Although Lockheed Alert Service Bulletin A382-57-91, Revision 1, dated March 25, 2009, specifies to submit certain information to the manufacturer, this AD does not include that requirement.

### **Parts Installation**

(k) As of the time specified in paragraph (k)(1) or (k)(2) of this AD, as applicable, no person may install, on any airplane, a barrel nut in the upper wing joint, engine truss, and rear beam pylon support unless the barrel nut has been modified in accordance with the Accomplishment Instructions of Lockheed Alert Service Bulletin A382-57-91, Revision 1, dated March 25, 2009.

(1) For unmarked barrel nuts with a deformed thread locking style: As of 30 days after the effective date of this AD.

(2) For all other discrepant barrel nuts: As of the effective date of this AD.

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

(l)(1) The Manager, Atlanta 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: Carl Gray, Aerospace Engineer, Airframe Branch, ACE-117A, Atlanta ACO, FAA, One Crown Center, 1895

Phoenix Boulevard, Suite 450, Atlanta, Georgia 30349; telephone (770) 703-6131; fax (770) 703-6097.

(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**

(m) You must use Lockheed Alert Service Bulletin A382-57-91, Revision 1, dated March 25, 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 Lockheed Continued Airworthiness Project Office, Attention Airworthiness, 86 South Cobb Drive, Marietta, Georgia 30063-0567; telephone 770-494-5444; fax 770-494-5445; e-mail [ams.portal@lmco.com](mailto:ams.portal@lmco.com); Internet <http://www.lockheedmartin.com/ams/tools/TechPubs.html>.

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

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

Issued in Renton, Washington, on May 7, 2009.

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