



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-08

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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 2010-01

2008-04-11 R1		Boeing	707-100 long body, -200, -100B long body, and -100B short body series airplanes; Model 707-300, -300B, -300C, and -400 series airplanes; and Model 720 and 720B
2008-09-12 R1		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2008-10-09 R1		Boeing	737-100, -200, -200C, -300, -400, and -500
2008-11-01 R1		Boeing	767-200, -300, -300F, and -400ER
2009-20-11	Cor	Boeing	737-300, -400, and -500
2009-24-11		General Electric	See AD
2009-26-03		Boeing	See AD
2009-26-04		Boeing	737-600, -700, -700C, -800, and -900
2009-26-10		Airbus	A380-841, -842, and -861
2009-26-12		Engine Components, Inc. (ECi)	See AD
2009-26-14		CONSTRUCCIONES AERONAUTICAS, S.A. (CASA)	CN-235, CN-235-100, CN-235-200, and CN-235-300
2009-26-15		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes, certificated in any category, serial numbers 17000156 through 17000169 inclusive; and Model ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2009-26-16		McDonnell Douglas	MD-11 and MD-11F
2009-26-17		MCDonnell	Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, and DC-10-40F airplanes, and MD-10-10F and MD-10-30F

Biweekly 2010-02

2008-10-06 R1		Boeing	747-400, -400D, and -400F
2008-10-10 R1		Boeing	737-600, -700, -700C, -800, and -900
2009-26-06		Honeywell International Inc	Engine: ALF502L and ALF502R series, and LF507-1F and LF507-1H
2009-26-09	S 2007-05-16	General Electric Company	Engine: CF34-1A, -3A, -3A1, -3A2, -3B, and -3B1
2010-01-01	S 2006-05-02	Boeing	747-200F, 747-200C, 747-400, 747-400D, and 747-400F
2010-01-04	S 2009-24-11	General Electric Company	Engine: CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1
2010-01-03		Fire Fighting Enterprises Limited	See AD
2010-01-05		CFM International, S.A	Engine: See AD
2010-01-06		Bombardier, Inc.	DHC-8-400, DHC-8-401, and DHC-8-402
2010-01-07		Airbus	A340-211, -212, -213, -311, -312, -313, -541, and -642
2010-01-08		Boeing	737-600, -700, and -800
2010-01-09		Boeing	737-300, -400, and -500
2010-01-11		Fokker Services B.V.	F.28 Mark 0070 and Mark 0100
2010-01-12		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU
2010-02-02		Dassault	Falcon 7X
2010-02-03		Airbus	A340-211, -212, -213, -311, -312, and -313
2010-02-04		Boeing	737-600, -700, -700C, -800, -900, and -900ER

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Biweekly 2010-03

2009-21-10 R1		AVOX Systems and B/E Aerospace	Appliance: Oxygen cylinder assemblies
2009-26-13		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343, 340-211, -212, -213, -311, -312, and -313
2010-01-02	S 2005-15-08	Boeing	747-100B SUD, -200B, -300, -400, and -400D
2010-01-10	S 2007-01-15	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP
2010-02-06		Sicma Aero Seat	Appliance: 90xx and 92xx series passenger seats
2010-02-09		Airbus	A318
2010-02-10		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 series airplanes; Model A340-211, -212, -213, -311, -312, -313 series airplanes; and Model A340-541 and -642
2010-02-11		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and BAE SYSTEMS (Operations) Limited Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-02-12		Fokker Services B.V	F.28 Mark 0070 and 0100

Biweekly 2010-04

2010-03-05		Boeing	747-200C and -200F
2010-03-07		Embraer	EMB-135BJ, EMB-135ER, -135KE, -135KL, -135LR, EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-03-08	S 2003-03-02	Boeing	767-200, -300 and -300F
2010-04-01		Dassault Aviation	Falcon 900EX
2010-04-02		Airbus	A310-221, -222, -322, -324, and -325 airplanes, and Model A300 B4-620, B4-622, B4-622R, and F4-622R
2010-04-03		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325

Biweekly 2010-05

2009-06-05 R1		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)
2010-04-04		Bombardier, Inc	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705)
2010-04-08		Embraer	ERJ 190-100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-04-09		Airbus	A330-201, -202, -203, -223, and -243, A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313
2010-04-10	S 2009-10-07	Airbus	A380-841, -842, and -861
2010-04-13		Airbus	A310-203, A310-221, and A310-222, A300 F4-605R and A300 F4-622R
2010-04-16		SICLI	Appliance: Portable fire extinguishers
2010-05-01		ATR-GIE Avions de Transport Régional	ATR42-200, -300, -320, and -500 airplanes; and Model ATR72-101, -201, -102, -202, -211, -212, and -212A
2010-05-04		McDonnell Douglas Corporation	MD-90-30
2010-05-05	S 2007-15-08	BAE Systems	ATP
2010-05-06		Airbus	A340-541 and -642
2010-05-07		Airbus	A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313

LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2010-06			
2009-22-05	S 2008-23-16	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-04-09	COR	Airbus	A330-201, -202, -203, -223, and -243, A340-211, -212, and -213 airplanes; and Model A340-311, -312, and -313
2010-04-12		Bombardier, Inc.	DHC-8-101, DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, DHC-8-202, DHC-8-301, DHC-8-311, and DHC-8-315
2010-05-03		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
2010-05-09		Dowty Propellers	Propeller: R354/4-123-F/13, R354/4-123-F/20, R375/4-123-F/21, R389/4-123-F/25, R389/4-123-F/26, and R390/4-123-F/27
2010-05-11		Boeing	747-100, 747-200B, 747-300, and 747SR
2010-05-12		Bombardier, Inc	DHC-8-102, DHC-8-103, DHC-8-106, DHC-8-201, and DHC-8-202
2010-05-13	S 2006-07-12	Boeing	737-100, -200, -200C, -300, -400, and -500
2010-05-14		Bombardier, Inc	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-06-01		Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-111, -211, -212, -214, -231, -232, and -233 airplanes; and Model A321-111, -112, -131, -211, -212, -213, -231, and -232
2010-06-04		Airbus	See AD
2010-06-05		Airbus	See AD
2010-06-51	E	Boeing	737-600, -700, -700C, -800, -900, and -900ER
Biweekly 2010-07			
97-17-04 R1	R	Pratt & Whitney	Engine: JT8D-209, -217, -217C, and -219
2010-05-13	COR, S 2006-07-12	Boeing	737-100, -200, -200C, -300, -400, and -500
2010-06-09		Boeing	777-200, -200LR, -300, -300ER, and 777F
2010-06-13		Learjet	45
2010-06-15		General Electric Company	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50C2F, CF6-50C2R, CF6-50E, CF6-50E1, and CF6-50E2, 767-200, -300, -300F, and -400ER
2010-06-16		Boeing	767-200, -300, -300F, and -400ER
2010-06-18		International Aero Engines	Engine: V2500-A1, V2522-A5, V2524-A5, V2525-D5, V2527-A5, V2527E-A5, V2527M-A5, V2528-D5, V2530-A5, and V2533-A5
2010-07-04		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, and -100 SU airplanes; Model ERJ 170-200 LR, -200 SU, and -200 STD airplanes; Model ERJ 190-100 STD, -100 LR, -100 ECJ, and -100 IGW
Biweekly 2010-08			
2010-06-10		Boeing	767-200, -300, and -300F
2010-06-14		Rolls-Royce plc	Engine: RB211-Trent 875-17, Trent 877-17, Trent 884-17, Trent 884B-17, Trent 892-17, Trent 892B-17, and Trent 895-17
2010-06-17		Boeing	757-200, -200CB, -200PF, and -300
2010-06-51		Boeing	737-600, -700, -700C, -800, -900, and -900ER
2010-07-01	S 2009-24-05	Rolls-Royce plc	See AD
2010-07-02	S 2006-22-05	Honeywell, Inc.	Appliance: Honeywell Primus II RNZ-850()/-851()
2010-07-03	S 2006-08-02	Boeing	747-200C and -200F
2010-07-06		Bombardier, Inc.	BD-100-1A10 (Challenger 300)
2010-07-08		Kelly Aerospace Energy Systems, LLC	Appliance: Kelly Aerospace Energy Systems
2010-07-09	S 2007-02-05	Rolls-Royce plc	Engine: RB211-Trent 768-60, RB211-Trent 772-60, and RB211-Trent 772B-60
2010-07-10		Airbus	A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-20



**FAA
Aviation Safety**

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2010-06-10 The Boeing Company: Amendment 39-16234. Docket No. FAA-2008-0978; Directorate Identifier 2008-NM-014-AD.

Effective Date

(a) This airworthiness directive (AD) is effective May 3, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 767-200, -300, and -300F series airplanes, certificated in any category; as identified in Boeing Service Bulletin 767-28A0094, Revision 1, dated April 23, 2009.

Note 1: This AD requires revisions to certain operator maintenance documents to include new inspections. Compliance with these inspections is required by 14 CFR 91.403(c). For airplanes that have been previously modified, altered, or repaired in the areas addressed by these inspections, the operator may not be able to accomplish the inspections described in the revisions. In this situation, to comply with 14 CFR 91.403(c), the operator must request approval for an alternative method of compliance (AMOC) according to paragraph (k) of this AD. The request should include a description of changes to the required inspections that will ensure the continued operational safety of the airplane.

Unsafe Condition

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

Compliance

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

Install Support Hardware and Modify Wiring of the Fuel Quantity Indicating System (FQIS) Densitometer; Replace Hot Short Protector (HSP)

(f) Within 60 months after the effective date of this AD, do the actions specified in paragraphs (f)(1) and (f)(2) of this AD, as applicable, in accordance with the Accomplishment Instructions of Boeing Service Bulletin 767-28A0094, Revision 1, dated April 23, 2009.

(1) For Group 1 airplanes, Group 2 airplanes, Configuration 1, and Group 3 airplanes: Install support hardware and modify the interfacing wiring of the FQIS densitometer.

(2) For Group 4 airplanes: Replace the existing HSP with a new HSP.

Note 2: In Figure 9, Step 8, of the Accomplishment Instructions of Boeing Service Bulletin 767-28A0094, Revision 1, dated April 23, 2009, the ground identification number is identified as GD19393S; however, the correct ground identification number is GD10393S.

Credit for Service Information Accomplished Previously

(g) Actions done before the effective date of this AD in accordance with Boeing Alert Service Bulletin 767-28A0094, dated November 20, 2007, are acceptable for compliance with the requirements of paragraph (f) of this AD.

Airworthiness Limitations (AWL) Revision

(h) Concurrently with accomplishing the actions required by paragraph (f) of this AD, revise the AWL section of the Instructions for Continued Airworthiness by incorporating AWL No. 28-AWL-22 into the Boeing 767 Maintenance Planning Data (MPD) Document, D622T001-9, Section 9, Revision May 2009.

No Alternative Critical Design Configuration Control Limitations (CDCCL)

(i) After the actions specified in paragraph (h) of this AD have been accomplished, no alternative CDCCL for AWL No. 28-AWL-22 may be used, unless the CDCCL is approved as an AMOC in accordance with the procedures specified in paragraph (k) of this AD.

Terminating Action for AWL Revision

(j) Incorporating AWL No. 28-AWL-22 into the AWL section of the Instructions for Continued Airworthiness in accordance with paragraph (g)(2) of AD 2008-11-01, amendment 39-15523, terminates the action required by paragraph (h) of this AD.

Alternative Methods of Compliance (AMOCs)

(k)(1) The Manager, Seattle Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Georgios Roussos, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6482; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

(1) You must use Boeing Service Bulletin 767-28A0094, Revision 1, dated April 23, 2009; and AWL No. 28-AWL-22 of the Boeing 767 Maintenance Planning Data (MPD) Document, D622T001-9, Section 9, Revision May 2009; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. The Boeing 767 MPD Document, D622T001-9, Section 9, Revision May 2009, contains the following effective pages:

List of Effective Pages:

Page title/description	Page No(s).	Revision	Date shown on page(s)
Title Page, MPD Section 9	9.0-1	May 2009	May 2009.
	9.0-2	None Shown *	None Shown.*
Table of Contents, MPD Section 9	9.0-3	May 2009	May 2009.
	9.0-4	None Shown *	None Shown.*
Revisions, MPD Section 9	9.0-5—9.0-14	May 2009	May 2009.
List of Effective Pages, MPD Section 9	9.0-15	May 2009	May 2009.
	9.0-16	None Shown *	None Shown.*
AWL No. 28-AWL-22	9.0-85	April 2008	April 2008.

* The dates shown on the pages of Boeing 767 MPD Document D622T001-9, Revision May 2009, are the revision level of those pages. Pages 9.0-2, 9.0-4, and 9.0-16 of Boeing 767 MPD Document D622T001-9, Revision May 2009, are intentionally not dated.

(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.

Issued in Renton, Washington, on March 4, 2010.
Suzanne Masterson,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-06-14 Rolls-Royce plc: Amendment 39-16239. Docket No. FAA-2009-1004; Directorate Identifier 2009-NE-36-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 3, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Rolls-Royce plc models RB211-Trent 875-17, Trent 877-17, Trent 884-17, Trent 884B-17, Trent 892-17, Trent 892B-17, and Trent 895-17 turbofan engines. These engines are installed on, but not limited to, Boeing 777 series airplanes.

Reason

(d) During 2004, an incident was reported involving uncontained multiple intermediate-pressure (IP) turbine blade release on a Trent 700 engine. The blade release was the result of an overspeed of the IP turbine rotor that was initiated by an internal fire in the high-pressure/intermediate-pressure (HP/IP) bearing chamber. Post-incident analysis and investigation has established that blockage of the HP/IP turbine bearing oil vent tube due to carbon deposits was a significant factor in the failure sequence. The Trent 800 has a similar type design standard to that of the Trent 700 and has also been found in service to be susceptible to carbon deposits in the oil vent tube.

This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. We are issuing this AD to prevent internal oil fires due to coking and carbon buildup in the HP/IP turbine bearing oil vent tube that could cause uncontained engine failure and damage to the airplane.

Actions and Compliance

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

(1) At the next engine shop visit after the effective date of this AD and thereafter at each engine shop visit, using the Accomplishment Instructions of Rolls-Royce plc Alert Service Bulletin No. RB.211-72-AE362, Revision 1, dated April 3, 2009:

- (i) Inspect the HP/IP turbine bearing internal and external oil vent tubes and bearing chamber for carbon buildup.
- (ii) Clean and flush the tubes and bearing chamber as required.
- (iii) Reject any oil vent tubes that do not meet inspection requirements after cleaning.

(2) This AD does not require reporting of inspection results, as does paragraphs 3.B.(4)(g) and 3.C.(9) of Rolls-Royce plc Alert Service Bulletin No. RB.211-72-AE362, Revision 1, dated April 3, 2009.

FAA AD Differences

(f) None.

Alternative Methods of Compliance (AMOCs)

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

Related Information

(h) Refer to MCAI European Aviation Safety Agency AD 2009-0071 (corrected April 14, 2009), for related information.

(i) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Rolls-Royce plc Alert Service Bulletin No. RB.211-72-AE362, Revision 1, dated April 3, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Rolls-Royce plc, PO Box 31, Derby, England; telephone: 011-44-1332-249428; fax: 011-44-1332-249223.

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

Issued in Burlington, Massachusetts on March 9, 2010.

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



2010-06-17 The Boeing Company: Amendment 39-16242. Docket No. FAA-2009-0795; Directorate Identifier 2009-NM-083-AD.

Effective Date

(a) This airworthiness directive (AD) is effective May 3, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model 757-200, -200CB, -200PF, and -300 series airplanes, certificated in any category; as identified in the service bulletins listed in Table 1 of this AD.

Table 1 – Applicability

Boeing Service Bulletin –	Revision–	Dated –	Applicable Model/Series–
757-35A0015	2	June 15, 2000	757-200, 757-200CB, 757-200PF
757-35A0016	1	June 15, 2000	757-300

Subject

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

Unsafe Condition

(e) This AD results from reports of a low-pressure flex-hose of a flightcrew oxygen system that burned through due to inadvertent electrical current from a short circuit in an adjacent audio select panel. We are issuing this AD to prevent inadvertent electrical current which can cause the low-pressure flex-hoses used in the flightcrew and supernumerary oxygen system to melt or burn, resulting in oxygen system leakage and smoke or fire.

Compliance

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

Inspection

(g) Within 36 months after the effective date of this AD, inspect to determine whether any low-pressure flex-hose of the flightcrew and supernumerary oxygen systems installed under the oxygen mask stowage location has a part number identified in Table 2 of this AD. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number of the low-pressure flex-hoses of the flightcrew and supernumerary oxygen system can be conclusively determined from that review.

(1) For any low-pressure flex-hose having a part number identified in Table 2 of this AD, before further flight, replace the hose with a new or serviceable part, in accordance with the Accomplishment Instructions of the applicable service bulletin identified in Table 1 of this AD. Recording the part number of the hose being replaced is not required by this AD.

(2) For any low-pressure flex-hose not having a part number identified in Table 2 of this AD, no further action is required by this paragraph.

Parts Installation

(h) As of the effective date of this AD, no person may install a flightcrew or supernumerary oxygen hose with a part number identified in Table 2 of this AD on any airplane.

Table 2 – Applicable part numbers

Boeing Specification Part Number –	Equivalent Boeing Supplier Part Numbers –				
	Sierra Engineering	Spencer Fluid	Puritan Bennett	Hydraflow	AVOX (formerly Sierra Engineering)
60B50059-70	835-01-70	9513-20S5-18.0	ZH784-20	38001-70	9513-835-01-70
60B50059-81	835-01-81	9513-20S5-24.0	ZH784-81	38001-81	9513-835-01-81

Actions Accomplished According to Previous Issue of Service Bulletin

(i) Actions accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 757-35A0015, dated September 2, 1999, or Revision 1, dated November 11, 1999; or Boeing Alert Service Bulletin 757-35A0016, dated November 11, 1999; are considered acceptable for compliance with the corresponding actions specified in 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: Nicholas Wilson, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle ACO, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 917-6476; fax (425) 917-6590. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

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

Material Incorporated by Reference

(k) You must use Boeing Service Bulletin 757-35A0015, Revision 2, dated June 15, 2000; or Boeing Service Bulletin 757-35A0016, Revision 1, dated June 15, 2000; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

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

Issued in Renton, Washington, on March 9, 2010.

Jeffrey E. Duven,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2010-06-51 The Boeing Company: Amendment 39-16250. Docket No. FAA-2010-0230; Directorate Identifier 2010-NM-071-AD.

Effective Date

(a) This AD becomes effective April 7, 2010, to all persons except those persons to whom it was made immediately effective by emergency AD 2010-06-51, issued on March 12, 2010, which contained the requirements of this amendment.

Affected ADs

(b) None.

Applicability

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

Subject

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

Unsafe Condition

(e) This AD results from a report of failure of the aft attach lugs on the left elevator tab control mechanism, which resulted in severe elevator vibration. The Federal Aviation Administration is issuing this AD to detect and correct a loose bearing in the aft lug of the elevator tab control mechanism, which could result in unwanted elevator and tab vibration. The consequent structural failure of the elevator or horizontal stabilizer could result in loss of aircraft control and structural integrity.

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 and Corrective Action

(g) For Groups 1, 2, and 3; and Group 4, Configuration 2; as identified in Boeing Alert Service Bulletin 737-27A1296, dated March 12, 2010: At the applicable time specified in paragraph 1.E.

Compliance of Boeing Alert Service Bulletin 737-27A1296, dated March 12, 2010, except as required by paragraph (i) of this AD, do a detailed inspection of the inboard and outboard aft attach lugs of the left and right elevator control tab mechanisms for gaps between the swage ring and the aft attach lug, and between the spacer and the aft attach lug; and try to move or rotate the spacer using hand pressure, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-27A1296, dated March 12, 2010.

(h) If, during accomplishment of the actions required by paragraph (g) of this AD, any gap is found between the swage ring and the aft attach lug, or between the spacer and the aft attach lug; or if the spacer moves or rotates: Before further flight, do the actions required by paragraphs (h)(1) and (h)(2) of this AD, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-27A1296, dated March 12, 2010.

(1) Inspect the replacement elevator tab control mechanism for discrepancies, as specified in paragraph (g) of this AD; and, if no discrepancy is found, install the replacement elevator tab control mechanism.

(2) Re-inspect the installed elevator tab control mechanism, as required by paragraph (g) of this AD.

Exception to Service Bulletin Specifications

(i) Where Boeing Alert Service Bulletin 737-27A1296, dated March 12, 2010, specifies a compliance time after the date of the original issue of the service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

Inspection Done According to Multi Operator Message (MOM)

(j) An inspection done before the effective date of this AD according to Boeing Multi Operator Message Number MOM-MOM-10-0159-01B, dated March 10, 2010, is considered acceptable for compliance with the corresponding inspection specified in paragraph (g) of this AD.

Reporting

(k) At the applicable time specified in paragraph (k)(1) or (k)(2) of this AD: Submit a report of the findings (both positive and negative) of the inspections required by paragraph (g) of this AD to Boeing Commercial Airplanes Group, Attention: Manager, Airline Support, e-mail: rse.boecom@boeing.com. The report must include the inspection results including a description of any discrepancies found, the airplane line number, and the number of flight cycles and flight hours accumulated on the airplane. Under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements contained in this AD and has assigned OMB Control Number 2120-0056.

(1) If the inspection was done on or after the effective date of this AD: Submit the report within 10 days after the inspection.

(2) If the inspection was done before the effective date of this AD: Submit the report within 10 days after the effective date of this AD.

Parts Installation

(l) For all airplanes: As of the effective date of this AD, no person may install an elevator tab control mechanism, part number 251A2430-(), on any airplane, unless the mechanism has been

inspected before and after installation, in accordance with the requirements of paragraph (g) of this AD, and no discrepancies have been found.

Special Flight Permit

(m) Special flight permits, as described in Section 21.197 and Section 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199), are not allowed.

Alternative Methods of Compliance (AMOCs)

(n)(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: Kelly McGuckin, Aerospace Engineer, Systems and Equipment Branch, ANM-130S, FAA, Seattle ACO, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone 425-917-6490; fax 425-917-6590. Information may be e-mailed to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

(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 the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that 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

(o) You must use Boeing Alert Service Bulletin 737-27A1296, dated March 12, 2010, 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.

(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.

Issued in Renton, Washington, on March 18, 2010.

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



2010-07-01 Rolls-Royce plc: Amendment 39-16244. Docket No. FAA-2009-0674; Directorate Identifier 2009-NE-25-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 3, 2010.

Affected Airworthiness Directives (ADs)

- (b) This AD supersedes AD 2009-24-05, Amendment 39-16092.

Applicability

- (c) This AD applies to:

(1) Rolls-Royce plc models RB211-Trent 553-61, 556-61, 556B-61, 560-61, 553A2-61, 556A2-61, 556B2-61, and 560A2-61 turbofan engines with fuel-to-oil heat exchangers (FOHEs) part number (P/N) 55027001-1 or 55027001-11 installed; and

(2) Rolls-Royce plc models RB211-Trent 768-60, 772-60, 772B-60, and RB211-Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan engines with FOHEs P/N 55003001-1 or 55003001-11 installed.

(3) The RB211-Trent 500 series engines are installed on, but not limited to, Airbus A340-500 and -600 series airplanes. The RB211-Trent 700 series engines are installed on, but not limited to, Airbus A330-200 and -300 series airplanes. The RB211-Trent 800 series engines are installed on, but not limited to, Boeing 777 series airplanes.

Reason

(d) This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product, and results from the risk of engine FOHE blockage. We are issuing this AD to prevent ice from blocking the FOHE, which could result in an unacceptable engine power loss and loss of control of the airplane.

Actions and Compliance

(e) For RB211-Trent 500 series turbofan engines and RB211-Trent 700 series turbofan engines, unless already done, within 6,000 flight hours after the effective date of this AD, or before January 1, 2011, whichever occurs first, do the following:

(1) For RB211-Trent 500 series turbofan engines, replace the FOHE P/N 55027001-1 or 55027001-11, with an FOHE that incorporates the modifications specified in Rolls-Royce plc Alert Service Bulletin (ASB) No. RB.211-79-AG346, dated October 23, 2009.

(2) For RB211-Trent 700 series turbofan engines, replace the FOHE, P/N 55003001-1 or 55003001-11, with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211-79-AG338, Revision 1, dated December 2, 2009.

(f) For RB211-Trent 800 series turbofan engines, unless already done, replace the FOHE, P/N 55003001-1 or 55003001-11, with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211-79-AG257, Revision 1, dated September 14, 2009 within 6,000 flight hours from January 4, 2010 (the effective date of FAA AD 2009-24-05), or before January 1, 2011, whichever comes first.

FAA AD Differences

(g) This AD differs from the Mandatory Continuing Airworthiness Information (MCAI) by requiring replacing the FOHE within 6,000 flight hours after the effective date of this AD for RB211-Trent 500 and RB211-Trent 700 series turbofan engines or January 4, 2010 for RB211-Trent 800 series turbofan engines, rather than within 6,000 flight hours from July 10, 2009.

Previous Credit

(h) For RB211-Trent 700 series engines, replacement of the FOHE with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211-79-AG338, dated September 29, 2009, complies with the replacement requirement specified in paragraph (e)(2) of this AD.

(i) For RB211-Trent 800 series engines, replacement of the FOHE with an FOHE that incorporates the modifications specified in Rolls-Royce plc ASB No. RB.211-79-AG257, dated June 24, 2009, complies with the replacement requirement specified in paragraph (f) of this AD.

Alternative Methods of Compliance (AMOCs)

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

Related Information

(k) Refer to European Aviation Safety Agency MCAI AD 2009-0142, dated July 13, 2009, and MCAI AD 2009-0257, dated December 3, 2009, for related information.

(l) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(m) You must use the service information specified in Table 1 of this AD to perform the FOHE modifications required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Rolls-Royce plc Alert Service Bulletin No. RB.211-79-AG346, dated October 23, 2009, and Rolls-Royce plc Alert

Service Bulletin No. RB. 211-79-AG338, Revision 1, dated December 2, 2009 under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The Director of the Federal Register previously approved the incorporation by reference of Rolls-Royce plc ASB No. RB.211-79-AG257, Revision 1, dated September 14, 2009, as of January 4, 2010.

(3) For service information identified in this AD, contact Rolls-Royce plc, P.O. Box 31, DERBY, DE24 8BJ, UK; telephone 44 (0) 1332 242424; fax 44 (0) 1332 249936.

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

Table 1 – Material Incorporated by Reference

Rolls-Royce plc Alert Service Bulletin No.	Page	Revision	Date
RB.211-79-AG346	All	Original	October 23, 2009
Total Pages: 28			
RB.211-79-AG338	All	1	December 2, 2009
Total Pages: 25			
RB.211-79-AG257	All	1	September 14, 2009

Issued in Burlington, Massachusetts, on March 17, 2010.

Francis A. Favara,
Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-07-02 Honeywell, Inc.: Amendment 39-16246. Docket No. FAA-2008-0556; Directorate Identifier 2007-NM-028-AD.

Effective Date

(a) This AD becomes effective May 3, 2010.

Affected ADs

(b) This AD supersedes AD 2006-22-05, Amendment 39-14802.

Applicability

(c) This AD applies to various aircraft, certificated in any category, equipped with any Honeywell Primus II RNZ-850()/-851() integrated navigation units (INUs) identified in a service bulletin identified in Table 1 of this AD. The aircraft include, but are not limited to, BAE Systems (Operations) Limited (Jetstream) Model 4101 airplanes; Bombardier Model BD-700-1A10 airplanes; Bombardier Model CL-215-6B11 (CL-415 variant) airplanes; Cessna Model 560, 560XL, and 650 airplanes; Dassault-Aviation Model Mystere-Falcon 50 airplanes; 328 Support Services GmbH (Dornier) Model 328-100 and -300 airplanes; Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135 airplanes and Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; Learjet Model 45 airplanes; Hawker Beechcraft Corporation Model Hawker 800XP and Hawker 1000 airplanes; and Sikorsky Model S-76A, S-76B, and S-76C aircraft.

Table 1 – Service Bulletins affected by this AD

INUs listed in Honeywell –	Revision –	Dated –
(1) Alert Service Bulletin 7510134-34-A0016	001	March 4, 2003
(2) Alert Service Bulletin 7510134-34-A0017	Original	July 11, 2003
(3) Service Bulletin 7510134-34-0018	Original	July 8, 2004
(4) Alert Service Bulletin 7510100-34-A0034	Original	February 28, 2003
(5) Alert Service Bulletin 7510100-34-A0035	Original	July 11, 2003
(6) Service Bulletin 7510100-34-0037	Original	July 8, 2004

Note 1: This AD applies to Honeywell Primus II RNZ-850()/-851() INUs installed on any aircraft, regardless of whether the aircraft has been otherwise modified, altered, or repaired in the area subject to the requirements of this AD. For aircraft that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request

approval for an alternative method of compliance in accordance with paragraph (o) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Unsafe Condition

(d) This AD results from reports indicating that erroneous localizer and glideslope indications have occurred on certain aircraft equipped with the subject INUs. We are issuing this AD to ensure that the flightcrew has accurate localizer and glideslope deviation indications. An erroneous localizer or glideslope deviation indication could lead to the aircraft making an approach off the localizer, which could result in impact with an obstacle or terrain.

Compliance

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

Restatement of Certain Requirements of AD 2006-22-05

Compliance Time for Action

(f) For any INU identified in Table 2 of this AD: Within 5 days after March 11, 2003 (the effective date of AD 2003-04-06, Amendment 39-13054, which was superseded by AD 2006-22-05), accomplish the requirements of either paragraph (g) or (h) of this AD. After December 1, 2006 (the effective date of AD 2006-22-05), only accomplishing the requirements of paragraph (g) of this AD is acceptable for compliance with this paragraph.

Table 2 – INUs identified in AD 2006-22-05

P/N 7510100-811 through 7510100-814 inclusive
P/N 7510100-831 through 7510100-834 inclusive
P/N 7510100-901 through 7510100-904 inclusive
P/N 7510100-911 through 7510100-914 inclusive
P/N 7510100-921 through 7510100-924 inclusive
P/N 7510100-931 through 7510100-934 inclusive

Inspection To Determine Part Number

(g) For any INU identified in Table 2 of this AD: Perform a one-time general visual inspection of the modification plate for the Honeywell Primus II NV-850 Navigation Receiver Module (NRM); part number 7510134-811, -831, -901, or -931; which is part of the Honeywell Primus II RNZ-850()/-851() INU; to determine if Mod L has been installed. The modification plate is located on the bottom of the Honeywell Primus II RNZ-850()/-851() INU, is labeled NV-850, and contains the part number and serial number for the Honeywell Primus II NV-850 NRM. If Mod T is installed, the letter will be blacked out. The Honeywell service bulletins listed in Table 1 of this AD are acceptable sources of service information for the inspection required by this paragraph.

(1) If Mod L is installed, before further flight, do paragraph (h) or (j) of this AD. After December 1, 2006, only accomplishment of paragraph (j) is acceptable for compliance with this paragraph.

Note 2: For the purposes of this AD, a general visual inspection is defined as: "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 enhance visual access to all exposed 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."

Aircraft Flight Manual (AFM) Revision

(h) For aircraft having an INU identified in Table 2 of this AD: Revise the Limitations section of the AFM to include the following statements (which may be accomplished by inserting a copy of the AD into the AFM):

"FLIGHT LIMITATIONS

When crossing the Outer Marker on glideslope, the altitude must be verified with the value on the published procedure.

For aircraft with a single operating glideslope receiver, the approach may be flown using normal procedures no lower than Localizer Only Minimum Descent Altitude (MDA).

For aircraft with two operating glideslope receivers, the aircraft may be flown to the published minimums for the approach using normal procedures if both glideslope receivers are tuned to the approach and both crew members are monitoring the approach using independent data and displays."

Parts Installation

(i) For aircraft having an INU identified in Table 2 of this AD: As of March 11, 2003, no person may install a Honeywell Primus II NV-850 NRM on which Mod L has been installed, on the Honeywell Primus II RNZ-850()/-851() INU of any aircraft, unless paragraph (h) or (j) of this AD is accomplished. As of December 1, 2006, only accomplishment of paragraph (j) is acceptable for compliance with this paragraph.

Inspection To Determine Modification Level of NRM

(j) For any INU identified in Table 2 of this AD on which Mod L was found to be installed during the inspection required by paragraph (g) of this AD, or for aircraft on which paragraph (h) of this AD was accomplished: Within 30 months after December 1, 2006, do an inspection of the modification plate on the Honeywell Primus II NV-850 NRM; part number 7510134-811, -831, -901, or -931; which is part of the Honeywell Primus II RNZ-850()/-851() INU; to determine if Mod L, N, P, R, or T is installed. The modification plate located on the bottom of the Honeywell Primus II RNZ-850()/-851() INU is labeled NV-850, and contains the part number and serial number for the Honeywell Primus II NV-850 NRM. If Mod L, N, P, R, or T is installed, the corresponding letter on

the modification plate will be blacked out. Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; are acceptable sources of service information for this inspection. If Mod L, N, P, or R is installed (which relates to the glide slope fix), within 30 months after December 1, 2006, do all applicable related investigative, corrective, and other specified actions, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and if Mod T is not installed (which relates to the localizer fix), within 30 months after December 1, 2006, do all applicable related investigative, corrective, and other specified actions, in accordance with the Accomplishment Instructions of Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; to ensure that the NRM is at the Mod T configuration. Once the actions in this paragraph are completed, the AFM revision required by paragraph (h) of this AD may be removed from the AFM.

(k) If the inspection specified in paragraph (j) of this AD is done within the compliance time specified in paragraph (f) of this AD, paragraph (g) of this AD does not need to be done.

New Requirements of This AD

Inspection To Determine Mod Level

(l) For any INU that is not identified in Table 2 of this AD: Within 30 months after the effective date of this AD, perform a one-time general visual inspection of the modification plate for the Honeywell Primus II NV-850 Navigation Receiver Module (NRM); part number 7510134-611, -631, -701, -731, 811, -831, -901, or -931; which is part of the Honeywell Primus II RNZ-850()/851() INU; to determine whether Mod L, N, P, R, or T is installed. The modification plate located on the bottom of the Honeywell Primus II RNZ-850()/851() INU is labeled NV-850, and contains the part number and serial number for the Honeywell Primus II NV-850 NRM. If Mod L, N, P, R, or T is installed, the corresponding letter on the modification plate will be blacked out. Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; are acceptable sources of service information for this inspection.

(1) If the NRM is part number 7510134-611, -631, -701, or -731, and has Mod T installed: No further action is required by this paragraph.

(2) If the NRM is part number 7510134-611, -631, -701, or -731, and Mod T is not installed, within 30 months after the effective date of this AD: Do all applicable related investigative, corrective, and other specified actions, in accordance with the accomplishment Instructions of Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; to ensure that the NRM is at the Mod T configuration.

(3) If the NRM is part number 7510134-811, -831, -901, or -931: Within 30 months after the effective date of this AD, do all applicable related investigative, corrective, and other specified actions, in accordance with the Accomplishment Instructions of Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; to ensure that the NRM part number has been updated to 7510134-611, -631, -701, -731 configuration and Mod T has been installed.

Parts Installation

(m) As of the effective date of this AD, no person may install a Honeywell Primus II RNZ-850()/851() INU that contains a NV-850 NRM part number 7510134-811, -831, -901, or -931; or part number 7510134-611, -631, -701, or -731, that does not have Mod T installed, unless paragraph (l) is accomplished.

No Report

(n) Where Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003 (or any of the related service information referenced therein), specifies to submit certain information to the manufacturer, this AD does not include that requirement.

Alternative Methods of Compliance (AMOCs)

(o)(1) The Manager, Los Angeles Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Daniel Bui, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5339; fax (562) 627-5210.

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

Material Incorporated by Reference

(p) You must use the service information contained in Table 3 of this AD, as applicable, to do the actions required by this AD, unless the AD specifies otherwise. (Only the first page of these documents specifies the revision level of the document; no other page contains this information.)

Table 3 – All Material Incorporated by Reference

Honeywell –	Revision –	Dated –
Alert Service Bulletin 7510134-34-A0016	001	March 4, 2003
Alert Service Bulletin 7510134-34-A0017	Original	July 11, 2003
Alert Service Bulletin 7510100-34-A0034	Original	February 28, 2003
Alert Service Bulletin 7510100-34-A0035	Original	July 11, 2003
Service Bulletin 7510100-34-0037	Original	July 8, 2004
Service Bulletin 7510134-34-0018	Original	July 8, 2004

(1) The Director of the Federal Register approved the incorporation by reference of the service information contained in Table 4 of this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

Table 4 – New Material Incorporated by Reference

Honeywell –	Revision –	Dated –
Alert Service Bulletin 7510134-34-A0016	001	March 4, 2003
Alert Service Bulletin 7510134-34-A0017	Original	July 11, 2003
Alert Service Bulletin 7510100-34-A0034	Original	February 28, 2003
Service Bulletin 7510134-34-0018	Original	July 8, 2004

(2) The Director of the Federal Register previously approved the incorporation by reference of Honeywell Alert Service Bulletin 7510100-34-A0035, dated July 11, 2003; and Honeywell Service Bulletin 7510100-34-0037, dated July 8, 2004; on December 1, 2006 (71 FR 62907, October 27, 2006).

(3) For service information identified in this AD, contact Honeywell Technical Operations Center, 1944 East Sky Harbor Circle, Phoenix, AZ 85034-3442; telephone (US & Canada) 800-601-3099, (International) 602-365-3099; Internet <http://www.honeywell.com>.

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

(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.

Issued in Renton, Washington, on March 17, 2010.

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



FAA
Aviation Safety

AIRWORTHINESS DIRECTIVE

www.faa.gov/aircraft/safety/alerts/
www.gpoaccess.gov/fr/advanced.html

2010-07-03 The Boeing Company: Amendment 39-16247. Docket No. FAA-2009-0684; Directorate Identifier 2008-NM-149-AD.

Effective Date

(a) This AD becomes effective May 7, 2010.

Affected ADs

(b) This AD supersedes AD 2006-08-02, Amendment 39-14556.

Applicability

(c) This AD applies to The Boeing Company Model 747-200C and -200F series airplanes, certificated in any category, as identified in Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008.

Subject

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

Unsafe Condition

(e) This AD results from new reports of cracking in the upper chord of the upper deck floor beams in Sections 41 and 42, and new analysis that shows the permanent fastener holes of the upper chord of certain upper deck floor beams in Section 41 are also susceptible to fatigue cracking. We are issuing this AD to detect and correct cracking in the upper chord of the upper deck floor beams. Such cracking could extend and sever the floor beams, which could result in rapid decompression and loss of controllability of the airplane.

Compliance

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

Requirements of AD 2006-08-02

Initial Compliance Time at a New Reduced Threshold

(g) At the earliest of the times specified in paragraphs (g)(1) through (g)(3) of this AD, do the inspection required by paragraph (h) of this AD.

(1) Before the accumulation of 22,000 total flight cycles, or within 1,000 flight cycles after March 15, 2004 (the effective date of AD 2004-03-11, which was superseded by AD 2006-08-02), whichever occurs later.

(2) For airplanes with 17,000 or more total flight cycles as of May 17, 2006 (the effective date of AD 2006-08-02): Before the accumulation of 18,000 total flight cycles, or within 90 days after May 17, 2006, whichever occurs later.

(3) For airplanes with fewer than 17,000 total flight cycles as of May 17, 2006: Before the accumulation of 15,000 total flight cycles, or within 1,000 flight cycles after May 17, 2006, whichever occurs later.

Inspections at Reduced Intervals for Certain Floor Beams and Repair

(h) Do the applicable inspection to find fatigue cracking in the upper chord of the upper deck floor beams as specified in Part 1 (Open-Hole High Frequency Eddy Current (HFEC) Inspection Method) or Part 2 (Surface HFEC Inspection Method) of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001. Do the inspections per the Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, except as provided by paragraph (k) of this AD. Any combination of the applicable inspection methods specified in Parts 1 and 2 may be used, provided that the corresponding repetitive inspection interval is used.

(1) If any crack is found, before further flight, repair per Part 3 (Upper Chord Repair) of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001; except where Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, specifies to contact Boeing for appropriate action, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (o) of this AD or repair according to data meeting the certification basis of the airplane approved by a Boeing Company Designated Engineering Representative (DER) or by an Authorized Representative for the Boeing Commercial Airplanes Delegation Option Authorization Organization. For a repair method to be approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, as required by this paragraph, the Manager's approval letter must specifically reference this AD. Do the applicable inspection of the repaired area per Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, at the applicable time per Part 3 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, and repeat the applicable inspection at the applicable interval per Figure 1 of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001.

(2) If no crack is found, repeat the applicable inspection per paragraph (h) of this AD at the applicable time specified in paragraphs (h)(2)(i) through (h)(2)(iii) of this AD. As an option to the repetitive inspections, accomplishment of paragraph (i)(1) or (i)(2) of this AD, before further flight, extends the threshold for the initiation of the repetitive inspections required by this paragraph.

(i) If the immediately preceding inspection was conducted using an open-hole HFEC inspection method: Conduct the next inspection of that area within 3,000 flight cycles of the last inspection.

(ii) If the immediately preceding inspection was conducted using a surface HFEC inspection method at stations 340 through 420 inclusive and station 500: Conduct the next inspection of that area within 750 flight cycles of the last inspection.

(iii) If the immediately preceding inspection was conducted using a surface HFEC inspection method at stations 440 and 520: Conduct the next inspection of that area at the earlier of the times

specified in paragraphs (h)(2)(iii)(A) and (h)(2)(iii)(B) of this AD, and thereafter at intervals not to exceed 250 flight cycles.

(A) Within 750 flight cycles since the last surface HFEC inspection required by paragraph (h) of this AD.

(B) Within 250 flight cycles after May 17, 2006.

Optional Repair/Modification

(i) For areas on which the inspection required by paragraph (h) of this AD is done per Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001; and on which no cracking is found: Accomplishment of the actions specified in either paragraph (i)(1) or (i)(2) of this AD extends the threshold for the initiation of the repetitive inspections required by paragraph (h)(2) of this AD. For areas on which the inspection required by paragraph (h) of this AD is done per Part 2 of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001; and on which no cracking is found: Accomplishment of the actions specified in paragraph (i)(1) of this AD extends the threshold for the initiation of the repetitive inspections required by paragraph (h)(2) of this AD.

(1) Do the applicable repair per Part 3 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, except as provided by paragraph (k) of this AD. At the applicable time specified in Table 1 of Part 3 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, do the applicable inspection of the repaired area per Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001. Repeat the inspection thereafter within the applicable interval of 3,000 flight cycles per Figure 1 of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001.

(2) Do the modification of the attachment hole of the floor panel per Figure 5 of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001, except as provided by paragraph (k) of this AD. Within 10,000 flight cycles after accomplishment of the modification, do the inspection of the modified area per Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001. Repeat the inspection thereafter within the applicable interval of 3,000 flight cycles per Figure 1 of Boeing Alert Service Bulletin 747-53A2439, dated July 5, 2001.

Determining the Number of Flight Cycles for Compliance Time

(j) For the purposes of calculating the compliance threshold and repetitive intervals for actions required by paragraph (g), (h), or (i) of this AD: As of May 17, 2006 (the effective date of AD 2006-08-02), all flight cycles, including the number of flight cycles in which cabin differential pressure is at 2.0 pounds per square inch (psi) or less, must be counted when determining the number of flight cycles that have occurred on the airplane.

New Requirements of This AD

Applicable Revisions of Service Bulletins

(k) Use the information in Tables 1 and 2 of this AD, at the applicable time specified in paragraphs (k)(1) and (k)(2) of this AD, to determine the part of the applicable service bulletin to use to accomplish the actions required by this AD.

(1) On or after May 17, 2006, but before the effective date of this AD, use only the service information listed in Table 1 or Table 2 of this AD.

Table 1 – Service information given in Boeing Alert Service Bulletin 747-53A2439, Revision 1, dated March 10, 2005

Do –	In accordance with –
(1) The actions required by paragraph (h) of this AD	Parts 1 and 2 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 1, dated March 10, 2005; as applicable.
(2) The applicable inspection of the repaired area required by paragraph (h)(1) of this AD	Parts 1 and 6 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 1, dated March 10, 2005; as applicable; at the applicable time specified in Table 1 of Part 3 of the Work Instructions of that service bulletin.
(3) The actions required by paragraph (i)(1) of this AD	Parts 1, 3, and 6 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 1, dated March 10, 2005; as applicable.
(4) The actions required by paragraph (i)(2) of this AD	Figure 5 and Part 1 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 1, dated March 10, 2005; as applicable.

(2) On or after the effective date of this AD, use only the service information listed in Table 2 of this AD.

Table 2 – Service information given in Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008

Do –	In accordance with –
(1) The actions required by paragraph (h) and (l) of this AD	Part 1 (open-hole or surface HFEC inspection, as applicable) of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008.
(2) The applicable inspection of the repaired area required by paragraph (h)(1) of this AD	Part 1 (open-hole HFEC inspection only) and Part 5 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008; at the applicable time specified in Table 1 of Part 2 of the Work Instructions of that service bulletin.
(3) The applicable repair required by paragraph (h)(1) of this AD.	Part 2 (upper chord repair at floor panel attach holes) of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008.
(4) The actions required by paragraph (i)(1) of this AD	Part 1 (open-hole HFEC inspection only), Part 2, and Part 5 of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008.
(5) The actions required by paragraph (i)(2) of this AD	Figure 5 and Part 1 (open-hole HFEC inspection only) of the Work Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008.

New Inspections and Related Investigative and Corrective Actions

(l) For all airplanes, except as provided by paragraphs (k)(1) and (k)(2) of this AD: At the applicable time specified in Paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-

53A2439, Revision 2, dated July 17, 2008, do the applicable open-hole or surface HFEC inspections for fatigue cracking in the upper chord of the upper deck floor beams in Area 5, and the inspection for fatigue cracking in the permanent fastener holes of the upper chord of certain upper deck floor beams in Areas 1, 2, 3, and 4, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008. Do all applicable related investigative and corrective actions before further flight. Repeat the applicable inspection thereafter at the applicable interval specified in Paragraph 1.E., "Compliance," of Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008.

(1) Where Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008, specifies a compliance time relative to the date of issuance of that service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

(2) Where Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008, specifies contacting Boeing for repair data: Before further flight, repair using a method approved in accordance with the procedures specified in paragraph (o) of this AD.

Optional New Modification for Areas 1, 2, 3, and 4

(m) For areas 1, 2, 3, and 4 as defined in Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008: Doing the modification and post-modification actions specified in Boeing Alert Service Bulletin 747-53A2696, dated October 16, 2008, terminates the repetitive inspection requirements of paragraphs (g) and (h) of this AD. Doing the modification and post-modification actions specified in Boeing Alert Service Bulletin 747-53A2696, dated October 16, 2008, terminates the repetitive inspection requirements of paragraph (l) of this AD, except at the upper deck floor beam at body station (BS) 460 and 480 and the upper deck floor beams aft of BS 520.

No Reporting Requirement

(n) Although Boeing Alert Service Bulletin 747-53A2439, Revision 1, dated March 10, 2005; and Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008; specify to submit certain information to the manufacturer, this AD does not include that requirement.

Alternative Methods of Compliance (AMOCs)

(o)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: 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. Or, e-mail information to 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

(3) AMOCs approved previously in accordance with AD 2006-08-02, are approved as AMOCs for the corresponding provisions of this AD.

(4) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation

Authorization (ODA) that has been authorized by the Manager, Seattle ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane, and the approval must specifically refer to this AD.

Material Incorporated by Reference

(p) You must use Boeing Alert Service Bulletin 747-53A2439, Revision 2, dated July 17, 2008, to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the new optional actions specified by this AD, you must use Boeing Alert Service Bulletin 747-53A2696, dated October 16, 2008, to perform those actions, unless the AD specifies otherwise.

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

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

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

(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.

Issued in Renton, Washington, on March 17, 2010.

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



2010-07-06 Bombardier, Inc.: Amendment 39-16251. Docket No. FAA-2009-1214; Directorate Identifier 2009-NM-091-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 7, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model BD-100-1A10 (Challenger 300) airplanes, certificated in any category, serial numbers 20002 through 20153 inclusive.

Subject

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

Reason

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

There has been an incident during a production flight test where the proximity-sensor electronic unit (PSEU) failed. This resulted in unannounced loss of:

- Wheel brakes below 10 knots;
- Thrust reverser;
- Nose wheel steering; and
- Auto-deployment of the multi-function spoilers.

A similar condition, if not corrected, may result in reduced controllability of the aircraft upon landing and possible overrun of the runway.

The original issue of this directive mandated the introduction of non-normal procedures to the airplane flight manual (AFM) as an interim corrective action to address PSEU failures.

Revision 1 of this directive amends the aircraft applicability and introduces a note providing terminating action, for use at operator discretion, if the aircraft has incorporated a PSEU with software version 12 in accordance with Bombardier Service Bulletin (SB) 100-32-12.

Actions and Compliance

(f) Unless already done, within 14 days after the effective date of this AD: Revise the Limitations Section of the Bombardier Challenger 300 AFM, CSP 100-1, to include the information in Bombardier Temporary Revision TR-39, dated March 2, 2005, as specified in the temporary revision. This temporary revision introduces a procedure for "PROX SYS FAULT (A)" and modifies the "WOW FAIL (C)" and "GEAR SYS FAIL (C)" procedures.

Note 1: This may be done by inserting a copy of Bombardier Temporary Revision TR-39, dated March 2, 2005, in the AFM. When this temporary revision has been included in general revisions of the AFM, the general revisions may be inserted in the AFM, provided the relevant information in the general revision is identical to that in Bombardier Temporary Revision TR-39, dated March 2, 2005.

Note 2: If the aircraft has incorporated a PSEU, part number (P/N) 30227-0401, 30227-0402, or 30227-0403, with software version 12, installed in accordance with Bombardier Service Bulletin 100-32-12, dated June 4, 2007, it is permissible to follow the revised AFM procedures included in Bombardier Temporary Revision TR-46, dated March 27, 2008, in lieu of using Bombardier Temporary Revision TR-39, dated March 2, 2005, specified in paragraph (f) of this AD.

FAA AD Differences

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

Other FAA AD Provisions

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

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

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

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

Related Information

(h) Refer to MCAI Transport Canada Civil Aviation Airworthiness Directive CF-2005-12R1, dated December 23, 2008; and Bombardier Temporary Revision TR-39, dated March 2, 2005; for related information.

Material Incorporated by Reference

(i) You must use Bombardier Temporary Revision TR-39, dated March 2, 2005, to the Bombardier Challenger 300 Airplane Flight Manual, CSP 100-1, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(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.

Issued in Renton, Washington, on March 19, 2010.

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



2010-07-08 Kelly Aerospace Energy Systems, LLC (formerly Kelly Aerospace Power Systems):
Amendment 39-16253. Docket No. FAA-2009-1259; Directorate Identifier 2009-NE-41-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective April 19, 2010.

Affected ADs

(b) None.

Applicability

(c) This AD applies to certain serial numbers (S/Ns) of Kelly Aerospace Energy Systems, LLC (KAES) rebuilt turbochargers listed by part number (P/N) in the following Table 1 of this AD. The affected S/Ns are listed in Table III of Kelly Aerospace Energy Systems, LLC Service Bulletin (SB) No. 039 A, dated February 10, 2010.

Table 1 – Part Numbers of Rebuilt Turbochargers Affected

406610-9005	406610-9015	406610-9018	406610-9019	406610-9020	406610-9021
406610-9025	406610-9026	406610-9028	406610-9029	406610-9030	406610-9032
407810-9001	406990-9004	408610-9001	409170-9001	409680-9011	465680-9001
465680-9004	465680-9005	465930-9002	465930-9003	465292-9002	465292-9004
465398-9002	407540-9003	466881-9001	466642-9001	466642-9002	466642-9005
466304-9003	600572-9000*	600573-9000*	600574-9001*	600575-9001*	600575-9002*
600576-9000*	600700-9001*	600803-9001*	600803-9002*	N/A	N/A

* P/Ns with an asterisk may have a CF prefix.

These rebuilt turbochargers are installed on, but not limited to, the engines and aircraft listed in Table IV of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010.

Unsafe Condition

(d) This AD results from three reports of infant mortality turbine wheel failure in rebuilt turbochargers, since June of 2007. We are issuing this AD to prevent separation or seizure of the turbocharger turbine, which could result in full or partial engine power loss, loss of engine oil, and smoke in the airplane cabin.

Compliance

(e) You are responsible for having the actions required by this AD performed within 10 hours time-in-service after the effective date of this AD, unless the actions have already been done.

Turbocharger Removal From Service

(f) Remove from service the rebuilt turbochargers listed by P/N in paragraph (c) of this AD that have a S/N listed in Table III of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010.

Installation Eligibility of Removed Turbochargers

(g) Removed turbochargers listed in Table III of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010, are eligible for installation once they are overhauled by an FAA-approved repair station. That overhaul must include replacing the turbine wheels listed by P/N in Table II of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010, replacing the turbine wheel mating bushings, and marking the attached Return To Service Tag with this AD number, which is AD 2010-07-08.

Installation Prohibition

(h) After the effective date of this AD, do not install any of the turbochargers listed in Table III of Kelly Aerospace Energy Systems, LLC SB No. 039 A, dated February 10, 2010, unless the turbocharger is overhauled as specified in paragraph (g) of this AD.

Alternative Methods of Compliance

(i) The Manager, Atlanta 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

(j) Under 14 CFR 39.23, we are limiting the special flight permits for this AD by the following conditions:

- (1) Use of minimum crew.
- (2) Flight made during daytime, using visual flight rule conditions.
- (3) Maximum flight altitude of 12,000 feet mean-sea-level, based upon terrain.

Related Information

(k) Contact Gary Wechsler, Aerospace Engineer, Propulsion, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; telephone (404) 474-5575; fax (404) 474-5606, for more information about this AD.

Material Incorporated by Reference

(1) You must use Kelly Aerospace Energy Systems, LLC Service Bulletin No. 039 A, dated February 10, 2010, to determine which turbocharger(s) are affected by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Kelly Aerospace Energy Systems, LLC, 2900 Selma Highway, Montgomery, Alabama 36108, telephone (334) 386-5400, fax (334) 386-5450, or go to: <http://www.kellyaerospace.com>, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on March 23, 2010.

Robert J. Ganley,
Acting Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-07-10 Airbus: Amendment 39-16255. Docket No. FAA-2009-1166; Directorate Identifier 2009-NM-107-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 7, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Airbus Model A300 B2-1C, B2K-3C, B2-203, B4-2C, B4-103, and B4-203 airplanes, certificated in any category, all serial numbers.

Subject

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

Reason

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

One operator reported loss of both pitch trims following autopilot disengagement after take off. Subsequent shop findings revealed severe damage to the power gears. Mal-phasing between the hydraulic motors was suspected to have induced excessive loads into the gear train, leading to collapse of one bearing on a shaft of the main gear, causing severe tooth damage. The combination of tooth damage and gear tilting caused the disconnection of two of the three hydraulic motors, resulting in jamming of the THSA [Trimmable Horizontal Stabilizer Actuator] gearbox and consequent loss of THSA control.

This condition, if not detected and corrected, could lead to further cases of mal-phasing of the hydraulic motors of the THSA, causing degradation of the power gears and potentially resulting in reduced control of the aeroplane.

For the reasons described above, this AD requires repetitive checks [on-airplane phasing inspections and magnetic plug inspections for metal particles on the drain

plug using detailed inspection methods] of the THSA and corrective actions [replacement of the THSA with a serviceable unit], depending on findings.

Actions and Compliance

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

(1) Within 4,000 flight hours after the last THSA overhaul or within 250 flight hours after the effective date of this AD, whichever occurs later: Perform an on-airplane phasing inspection of the THSA, and a magnetic plug inspection for metal particles on the drain plug of the THSA, using detailed inspection methods, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-27-0201, dated March 9, 2009.

(i) If the THSA passes the phasing inspection, but the magnetic plug inspection reveals metal particles that are equal to or less than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in.), and the depth of the particle layer does not exceed 1 mm (0.0393 in.), repeat the inspections thereafter at intervals not to exceed 2,500 flight hours in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-27-0201, dated March 9, 2009.

(ii) If the THSA passes the phasing inspection, but the magnetic plug inspection reveals metal particles with dimensions greater than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in.), or a layer of particles with a depth greater than 1 mm (0.0393 in.) is found, before further flight, replace the THSA with a serviceable unit, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-27-0201, dated March 9, 2009.

(iii) If the THSA fails the phasing inspection and the magnetic plug inspection reveals metal particles that are equal to or less than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in.), and the depth of the particle layer does not exceed 1 mm (0.0393 in.), within 500 flight hours after the inspection, replace the THSA with a serviceable unit, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-27-0201, dated March 9, 2009.

(iv) If the THSA fails the phasing inspection and the magnetic plug inspection reveals metal particles with dimensions greater than 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in.), or a layer of particles with a depth greater than 1 mm (0.0393 in.) is found, before further flight, replace the THSA with a serviceable unit, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A300-27-0201, dated March 9, 2009.

Note 1: 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 a mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate procedures may be required."

Note 2: A "serviceable" THSA is one that has a correct hydraulic motor phasing and no particles or few particles with maximum dimensions of 1.5 mm (0.059 in.) x 0.5 mm (0.0196 in.) and a layer of particles with a maximum depth of 1 mm (0.0393 in.) found on the magnetic plug.

(2) Within 2,500 flight hours after replacing any THSA, perform a phasing inspection of the THSA, and a magnetic plug inspection for metal particles on the drain plug of the THSA, as specified in paragraph (f)(1) of this AD. Replacing the THSA, as required by paragraphs (f)(1)(ii), (f)(1)(iii), and (f)(1)(iv) of this AD, as applicable, does not constitute terminating action for the repetitive inspections as required by paragraph (f)(1)(i) of this AD.

(3) As of the effective date of this AD, do not install a replacement THSA on any airplane, unless it has been inspected in accordance with the requirements of paragraphs (f)(1)(i) through (f)(1)(iv), as applicable, of this AD.

(4) Within 3 weeks after removal of a THSA unit from an airplane, send it to the THSA manufacturer, Goodrich Actuation Systems, Stafford Road Fordhouses, Wolverhampton, West Midlands WV10 7EH, England.

(5) Submit a report of the findings (both positive and negative) of the inspections required by paragraph (f)(1) of this AD to the Manager, Airbus Customer Service Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex France; telephone +33 5 61 93 33 33; telex AIRBU 530526F; fax +33 5 61 93 42 51; at the applicable time specified in paragraph (f)(5)(i) or (f)(5)(ii) of this AD. The report must include the inspection results (including no findings), and replacement or actions to be done.

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

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

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

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

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

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0111, dated May 13, 2009; and Airbus Mandatory Service Bulletin A300-27-0201, dated March 9, 2009; for related information.

Material Incorporated by Reference

(i) You must use Airbus Mandatory Service Bulletin A300-27-0201, including Appendices 1, 2, and 3, dated March 9, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

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

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

(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.

Issued in Renton, Washington, on March 25, 2010.

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