



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2012-03

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U.S. Department of Transportation
Federal Aviation Administration
Engineering Procedures Office
P. O. Box 25082
Oklahoma City, OK 73125-0460

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 2012-01

2011-18-21	S 2004-26-05	Rolls-Royce plc	Engine: RB211-524B-02, -524B3-02, RB211-524B2, -524B4, -524C2, -524D4, RB211-524G and -524H series
2011-27-03		Boeing	737
2011-27-05	S 2004-12-03	Saab AB, Saab Aerosystems	340A (SAAB/SF340A) and SAAB 340B
2011-27-06		Dassault Aviation	Falcon 7X

Biweekly 2012-02

2011-25-05		Boeing	767-200, -300, -300F, and -400ER series
2012-01-06		Boeing	767-200 and 767-300 series
2012-01-08		328 Support Services GmbH	328-100 and 328-300
2012-01-09		Boeing	757-200, -200CB, and -300 series
2012-01-10		General Electric	Engine: CF34-10E series

Biweekly 2012-03

2011-24-04	COR	Boeing	DC-10-10, DC-10-10F, and MD-10-10F
2012-01-04		EADS CASA	CN-235-100, CN-235-200, and CN-235-300
2012-02-03		CFM International S.A.	Engine: CFM56-5B1/3, CFM56-5B2/3, CFM56-5B3/3, CFM56-5B4/3, CFM56-5B5/3, CFM56-5B6/3, CFM56-5B7/3, CFM56-5B8/3, CFM56-5B9/3, CFM56-5B3/3B1, and CFM56-5B4/3B1
2012-02-04		Rolls-Royce plc	Engine: RB211-Trent 553-61, RB211-Trent 553A2-61, RB211-Trent 556-61, RB211-Trent 556A2-61, RB211-Trent 556B-61, RB211-Trent 556B2-61, RB211-Trent 560-61, and RB211-Trent 560A2-61 turbofan
2012-02-07	S 2011-02-07 S 2011-18-01	General Electric	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 turbofan
2012-02-08		Aviation Communication & Surveillance Systems LLC	Appliance: See AD
2012-02-09		Boeing	737-100, -200, -200C, and -300 series
2012-02-11	S 2011-11-08	Rolls-Royce plc	Engine: RB211-535E4-37, -535E4-B-37, -535E4-B-75, and -535E4-C-37 turbofan
2012-02-12		Bombardier Inc	DHC-8-400, -401, and -402
2012-03-51	E	Lockheed	P2V



CORRECTION: Federal Register Volume 77, Number 23 (Friday, February 3, 2012); Pages 5386-5387.

2011-24-04 The Boeing Company: Amendment 39-16868; Docket No. FAA-2010-1206; Directorate Identifier 2009-NM-216-AD.

(a) Effective Date

This AD is effective January 3, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model DC-10-10, DC-10-10F, and MD-10-10F airplanes; certificated in any category; as identified in Boeing Alert Service Bulletin DC10-57A156, Revision 2, dated August 23, 2011.

(d) Subject

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

(e) Unsafe Condition

This AD results from reports of three instances of fuel leaks in the lower cap splice of the wing rear spar at station Xors=409. The Federal Aviation Administration is issuing this AD to detect and correct cracking on the lower cap of the rear spar of the left and right wings between stations Xors=417 and the outboard edge of the lower cap splice of the wing rear spar at station Xors=400, which could result in fuel leaks or cracking of the lower wing skin and structure, causing possible inability of the structure to sustain the limit load and adversely affecting the structural integrity of the airplane.

(f) Compliance

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

(g) Inspection

Within 1,750 flight cycles after the effective date of this AD, do an eddy current test high frequency (ETHF) inspection for cracking on the lower cap of the rear spar of the left and right wings between stations Xors=417 and the outboard edge of the lower cap splice of the wing rear spar at

station Xors=400, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin DC10-57A156, Revision 2, dated August 23, 2011.

(1) If no cracking is found, repeat the inspection required by paragraph (g) of this AD thereafter at intervals not to exceed 1,750 flight cycles.

(2) If any cracking is found in the spar cap aft leg at the fastener holes, and that cracking can be removed by hole enlargement, before further flight, do a permanent repair, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010. Within 1,750 flight cycles after doing the applicable permanent repair, and thereafter at intervals not to exceed 1,750 flight cycles, do ETHF and high frequency eddy current inspections for cracking in accordance with Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD.

(3) If any cracking is found in the spar cap aft leg at the fastener holes, and that cracking cannot be removed by hole enlargement but it does not extend into the vertical leg, before further flight, do the applicable actions specified in paragraph (g)(3)(i) or (g)(3)(ii) of this AD:

(i) If cracking is found between Station Xors=400 and inboard of Station Xors=408, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD (Alternative Method of Compliance (AMOCs) paragraph).

(ii) If cracking is found between Stations Xors=408 and Xors=417, do a permanent repair, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010. Within 4,550 flight cycles after doing a permanent repair, and thereafter at intervals not to exceed 4,550 flight cycles, do ETHF and ultrasonic inspections for cracking, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD.

(4) If any cracking is found in the spar cap aft leg at fastener holes and that cracking extends into the vertical leg of the spar cap, do the actions specified in paragraph (g)(4)(i) or (g)(4)(ii) of this AD.

(i) If any cracking is found between Station Xors=400 and inboard of Station Xors=408, before further flight, do the applicable permanent repair, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010. Within 4,550 flight cycles after doing the permanent repair, and thereafter at intervals not to exceed 4,550 flight cycles, do ETHF and ultrasonic inspections for cracking of the repaired area, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD.

(ii) If any cracking is found between Stations Xors=408 and Xors=417, do the actions in paragraphs (g)(4)(ii)(A) or (g)(4)(ii)(B) of this AD.

(A) Do the actions in paragraphs (g)(4)(ii)(A)(1) and (g)(4)(ii)(A)(2) of this AD.

(1) Before further flight, do a temporary repair, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010. Within 1,650 flight cycles after doing the temporary repair; and thereafter at intervals not to exceed 1,650 flight cycles, do ETHF and ultrasonic inspections for cracking of the repaired area, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010, until the permanent repair required by paragraph (g)(4)(ii)(A)(2)

of this AD is done. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD.

(2) Within 7,000 flight cycles after the temporary repair has been done, do the applicable permanent repair, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010. Within 4,550 flight cycles after doing the permanent repair, and thereafter at intervals not to exceed 4,550 flight cycles, do ETHF and ultrasonic inspections for cracking of the repaired area, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD.

(B) Before further flight do the applicable permanent repair, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010. Within 4,550 flight cycles after doing the permanent repair, and thereafter at intervals not to exceed 4,550 flight cycles, do ETHF and ultrasonic inspections for cracking of the repaired area, in accordance with Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010. If any cracking is found during any inspection required by this paragraph, before further flight, repair the cracking, in accordance with the procedures specified in paragraph (i) of this AD.

(h) Credit for Actions Accomplished in Accordance With Previous Service Information

Actions accomplished before the effective date of this AD according to Boeing Alert Service Bulletin DC10-57A156, dated September 16, 2009; and Revision 1, dated March 10, 2010; are considered acceptable for compliance with the corresponding actions specified in this AD.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office, (ACO) FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 97012-4137; phone: 562-627-5234; fax: 562-627-5210; email: nenita.odesa@faa.gov.

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

(3) An AMOC that provides an acceptable level of safety may be used for any repair required by this AD if it is approved by the Boeing Commercial Airplanes Organization Designation Authorization (ODA) that has been authorized by the Manager, Los Angeles ACO to make those findings. For a repair method to be approved, the repair must meet the certification basis of the airplane and 14 CFR 25.571, Amendment 45, and the approval must specifically refer to this AD.

(j) Related Information

For more information about this AD, contact Nenita Odesa, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles ACO, 3960 Paramount Boulevard, Lakewood, California 97012-4137; phone: 562-627-5234; fax: 562-627-5210; email: nenita.odesa@faa.gov.

(k) Material Incorporated by Reference

You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on the date specified:

(1) Boeing Alert Service Bulletin DC10-57A156, Revision 2, dated August 23, 2011; IBR approved January 3, 2012.

(2) Boeing DC-10-10 Service Rework Drawing SR10570019, Revision K, dated April 17, 2009, including Parts List PL SR10570019, Revision K, dated April 23, 2009, including Boeing Engineering Order, Revision L, dated April 14, 2010; IBR approved January 3, 2012. Only Sheet 1 of this drawing indicates the revision date of this document.

(3) Boeing DC-10-10 Service Rework Drawing SR10570048, Revision K, dated October 7, 2010, including Parts List PL SR10570048, Revision K, dated October 14, 2010; IBR approved January 3, 2012. Only Sheet 1 of this drawing indicates the revision date for this document.

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

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

(6) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, 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 November 7, 2011.

Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2012-01-04 EADS CASA (Type Certificate Previously Held by Construcciones Aeronauticas, S.A.): Amendment 39-16916. Docket No. FAA-2011-1091; Directorate Identifier 2011-NM-037-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective March 13, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to EADS CASA (Type Certificate previously held by Construcciones Aeronauticas, S.A.) Model CN-235-100, CN-235-200, and CN-235-300 airplanes; certificated in any category; serial numbers C-030 through C-149 inclusive.

(d) Subject

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

(e) Reason

This AD was prompted by reports of failures of the engine condition control cable which led to an engine shut down. We are issuing this AD to detect and correct failure of the engine condition control cable which could cause a consequent runway excursion during take-off, or reduced control of the airplane during flight.

(f) Compliance

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

(g) Inspections

Within 9 months or 300 flight hours, whichever occurs first after the effective date of this AD, inspect to determine whether the engine condition control cable has part number (P/N) 35-56382-0003. If an engine condition control cable having P/N 35-56382-0003 is installed, within 9 months or 300 flight hours, whichever occurs first after the effective date of this AD, do a detailed inspection for excessive wear of the engine condition control cable (including control rods, levers, and pulleys near the flight compartment center console having incorrect freedom and range of movement, incorrect assembly and locking, distortion, damage, corrosion, incorrect security of attachment; and control rod end fittings having excessive wear, i.e., kinks or distortion, corrosion, reduced diameter of cable, and broken wires); in accordance with Section 76-10-00, "Power and Condition Control,"

Block 601 (Configuration 1), "Inspection/Check," Paragraph 1.B., of the Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010.

(h) Repetitive Inspections

For airplanes with engine condition control cable having P/N 35-56382-0003: Within 9 months or 300 flight hours after doing the detailed inspection required by paragraph (g) of this AD, whichever occurs first, repeat the detailed inspection specified in paragraph (g) of this AD.

(i) Replacement of Engine Condition Control Cable Due to Excessive Wear

If, during any inspection required by paragraph (g) or (h) of this AD, excessive wear of the engine condition control cable is found: Before further flight, replace the engine condition control cable with P/N 35-56382-0005, in accordance with Section 76-10-12, "Power and Condition Control Cables," Block 401 (Configuration 1), "Removal/Installation," Paragraph 3., of the Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010.

(j) Replacement of Engine Condition Control Cable

Within 27 months or 900 flight hours, whichever occurs first after the effective date of this AD: Unless the engine condition control cable has already been replaced in accordance with paragraph (i) of this AD, replace the engine condition control cable having P/N 35-56382-0003 with an engine condition control cable having P/N 35-56382-0005, in accordance with Section 76-10-12, "Power and Condition Control Cables," Block 401 (Configuration 1), "Removal/Installation," Paragraph 3., of the Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010.

(k) Parts Installation

As of the effective date of this AD, no person may install an engine condition control cable having P/N 35-56382-0003, on any airplane.

(l) Other FAA AD Provisions

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. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it 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. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding 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.

(m) Related Information

Refer to MCAI EASA Airworthiness Directive 2011-0010, dated January 20, 2011; and Section 76-10-00, "Power and Condition Control," Block 601 (Configuration 1), "Inspection/Check," Paragraph 1.B., and Section 76-10-12, "Power and Condition Control Cables," Block 401 (Configuration 1), "Removal/Installation," Paragraph 3., of the Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010; for related information.

(n) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(i) Section 76-10-00, "Power and Condition Control," Block 601 (Configuration 1) (pages 601 through 606), "Inspection/Check," Paragraph 1.B. of the Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010. Only the title page and Record of Revisions of Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010, specify the revision level of the document.

(ii) Section 76-10-12, "Power and Condition Control Cables," Block 401 (Configuration 1) (pages 401 through 406), "Removal/Installation," Paragraph 3., of the Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010. Only the title page and Record of Revisions of Airbus Military CN-235 Aircraft Maintenance Manual, Revision 57, dated July 15, 2010, specify the revision level of the document.

(2) For service information identified in this AD, contact EADS-CASA, Military Transport Aircraft Division (MTAD), Integrated Customer Services (ICS), Technical Services, Avenida de Aragón 404, 28022 Madrid, Spain; telephone +34 91 585 55 84; fax +34 91 585 55 05; email MTA.TechnicalService@casa.eads.net; Internet <http://www.eads.net>.

(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 an NARA facility, 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 January 6, 2012.

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



2012-02-03 CFM International, S.A.: Amendment 39-16926; Docket No. FAA-2011-0946; Directorate Identifier 2011-NE-02-AD.

(a) Effective Date

This AD is effective March 15, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to CFM International, S.A. CFM56-5B1/3, CFM56-5B2/3, CFM56-5B3/3, CFM56-5B4/3, CFM56-5B5/3, CFM56-5B6/3, CFM56-5B7/3, CFM56-5B8/3, CFM56-5B9/3, CFM56-5B3/3B1, and CFM56-5B4/3B1 engines equipped with fan blades part number (P/N) 338-002-114-0 that have a serial number (S/N) listed in Appendix A of CFM International Service Bulletin (SB) No. CFM56-5B S/B 72-0777, Revision 1, dated April 11, 2011.

(d) Unsafe Condition

This AD was prompted by a normal quality sampling at CFM International, S.A. that isolated a production batch of fan blades with nonconforming geometry of mid-span shroud tips of the fan blades. This defect could cause the upper panel of the fan blade to be liberated following foreign object damage (FOD) or a bird strike, and likely result in an inflight shutdown (IFSD). We are issuing this AD to prevent an IFSD of one or more engines following FOD or a bird strike.

(e) Compliance

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

(f) Remove Fan Blades From Service

For engines that have fan blades, P/N 338-002-114-0, with S/Ns listed in Appendix A of CFM International SB No. CFM56-5B S/B 72-0777, Revision 1, dated April 11, 2011, remove the fan blades from service within 5,000 flight hours after the effective date of this AD.

(g) Installation Prohibition

After the effective date of this AD, do not install any fan blade, P/N 338-002-114-0, that has a S/N listed in Appendix A of CFM International SB No. CFM56-5B S/B 72-0777, Revision 1, dated April 11, 2011, onto any engine.

(h) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(i) Related Information

For more information about this AD, contact Martin Adler, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7157; fax: (781) 238-7199; email: martin.adler@faa.gov.

(j) Material Incorporated by Reference

(1) You must use the following service information to identify the fan blade S/Ns affected by this AD. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information.

(2) CFM International Service Bulletin No. CFM56-5B S/B 72-0777, Revision 1, dated April 11, 2011.

(3) For service information identified in this AD, contact CFM International, Inc., Aviation Operations Center, 1 Neumann Way, M/D Room 285, Cincinnati, OH 45125; International Phone: 1-(513) 552-3272; USA Phone: (877) 432-3272; International Fax: 1-(513) 552-3329; USA Fax: (877) 432-3329; email: geae.aoc@ge.com; or CFM International SA, Customer Support Center, International Phone: 33 1 64 14 88 66; Fax: 33 1 64 79 85 55; e-mail: snecma.csc@snecma.fr.

(4) You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803. For information on the availability of this material at the FAA, call 781-238-7125.

(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/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on January 19, 2012.

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



2012-02-04 Rolls-Royce plc: Amendment 39-16927; Docket No. FAA-2012-0004; Directorate Identifier 2012-NE-01-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective February 24, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Rolls-Royce plc RB211-Trent 553-61, RB211-Trent 553A2-61, RB211-Trent 556-61, RB211-Trent 556A2-61, RB211-Trent 556B-61, RB211-Trent 556B2-61, RB211-Trent 560-61, and RB211-Trent 560A2-61 turbofan engines that have not complied with Rolls-Royce plc Service Bulletin No. RB.211-73-G723, and that have any of the following fuel tube part numbers installed:

- (1) FW57605.
- (2) FW17689.
- (3) FW57604.
- (4) FK30710.
- (5) FW57578.
- (6) FK30713.

(d) Reason

This AD was prompted by reports of wear found between the securing clips and the low-pressure (LP) fuel tube outer surface, which reduces the fuel tube wall thickness, leading to fracture of the fuel tube and consequent fuel leak. We are issuing this AD to prevent engine fuel leaks, which could result in risk to the airplane.

(e) Actions and Compliance

Unless already done, do the following one-time actions within 1,600 flight hours after the effective date of this AD.

(1) Visually inspect the fuel tube clips holding the LP fuel tube run from the LP fuel pump to the fuel-oil-heat exchanger, and the clips holding the LP fuel tube run from the LP filter to the high-pressure (HP) fuel pump, for evidence of damage or wear and replace as necessary. Do this in accordance with paragraphs 3.A(4)(a) through 3.A(4)(c) of Rolls-Royce plc Alert Service Bulletin No. RB.211-73-AG797, dated October 26, 2011.

(2) Clean and dry the LP fuel tube run from the LP fuel pump to the fuel-oil-heat exchanger, and the LP fuel tube run from the LP filter to the HP fuel pump.

- (i) Visually inspect for evidence of damage, wear near the clip locations, and for fuel leakage.

(ii) Reject the tube and replace it if evidence of fuel leakage or contact fretting to a depth of greater than 0.1 mm (0.004 in.) on the outer surface of a bend, or 0.2 mm (0.008 in.) in any other area, is evident.

(f) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(g) Related Information

(1) For more information about this AD, contact Alan Strom, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; email: alan.strom@faa.gov; phone: (781) 238-7143; fax: (781) 238-7199.

(2) Refer to European Aviation Safety Agency AD 2011-0243, dated December 20, 2011, for related information.

(h) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(2) Rolls-Royce plc Alert Service Bulletin No. RB.211-73-AG797, dated October 26, 2011.

(3) For service information identified in this AD, contact Rolls-Royce plc, Corporate Communications, P.O. Box 31, Derby, England, DE248BJ; phone: 011-44-1332-242424; fax: 011-44-1332-245418 or email: http://www.rolls-royce.com/contact/civil_team.jsp.

(4) You may review copies of the service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238-7125.

(5) You may also review copies of the service information incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on January 19, 2012.

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



2012-02-07 General Electric Company: Amendment 39-16930; Docket No. FAA-2010-0068; Directorate Identifier 2010-NE-05-AD.

(a) Effective Date

This airworthiness directive (AD) is effective March 6, 2012.

(b) Affected ADs

This AD supersedes AD 2011-02-07, Amendment 39-16580 (76 FR 6323, February 4, 2011) and AD 2011-18-01, Amendment 39-16783 (76 FR 52213, August 22, 2011).

(c) Applicability

This AD applies to General Electric Company (GE) 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 turbofan engines, including engines marked on the engine data plate as CF6-50C2-F and CF6-50C2-R, with any of the low-pressure turbine (LPT) rotor stage 3 disk part numbers listed in Table 1 of this AD installed.

Table 1—Applicable LPT Rotor Stage 3 Disk Part Numbers

9061M23P06	9061M23P07	9061M23P08	9061M23P09	9224M75P01
9061M23P10	1473M90P01	1473M90P02	1473M90P03	1473M90P04
9061M23P12	9061M23P14	9061M23P15	9061M23P16	1479M75P01
1479M75P02	1479M75P03	1479M75P04	1479M75P05	1479M75P06
1479M75P07	1479M75P08	1479M75P09	1479M75P11	1479M75P13
1479M75P14	N/A	N/A	N/A	N/A

(d) Unsafe Condition

This AD was prompted by the determination that a new lower life limit for the LPT rotor stage 3 disks listed in Table 1 of this AD is necessary. We are issuing this AD to prevent critical life-limited rotating engine part failure, which could result in an uncontained engine failure and damage to the airplane.

(e) Compliance

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

(f) Borescope Inspections (BSI) of High-Pressure Turbine (HPT) Rotor Stage 1 and Stage 2 Blades

For the BSIs required by paragraphs (f)(1), (f)(2), and (f)(3) of this AD, inspect the blades from the forward and aft directions. Inspect all areas of the blade airfoil. Your inspection must include blade leading and trailing edges and their convex and concave airfoil surfaces. Inspect for signs of impact, cracking, burning, damage, or distress.

(1) Perform an initial BSI of the HPT rotor stage 1 and stage 2 blades within 10 cycles after the effective date of this AD.

(2) Thereafter, repeat the BSI of the HPT rotor stage 1 and stage 2 blades within every 75 cycles since last inspection (CSLI).

(3) Borescope-inspect the HPT rotor stage 1 and stage 2 blades within the cycle limits after the engine has experienced any of the events specified in Table 2 of this AD.

(4) Remove any engine from service before further flight if the engine fails any of the BSIs required by this AD.

Table 2—Conditional BSI Criteria

If the engine has experienced:	Then borescope-inspect:
(i) An exhaust gas temperature (EGT) above redline.	Within 10 cycles.
(ii) A shift in the smoothed EGT trending data that exceeds 18 °F (10 °C), but is less than or equal to 36 °F (20 °C).	Within 10 cycles.
(iii) A shift in the smoothed EGT trending data that exceeds 36 °F (20 °C)	Before further flight.
(iv) Two consecutive raw EGT trend data points that exceed 18 °F (10 °C), but is less than or equal to 36 °F (20 °C), above the smoothed average.	Within 10 cycles.
(v) Two consecutive raw EGT trend data points that exceed 36 °F (20 °C) above the smoothed average	Before further flight.

(g) Actions Required for Engines With Damaged HPT Rotor Blades

For those engines that fail any BSI requirements of this AD, before returning the engine to service:

(1) Remove the LPT rotor stage 3 disk from service; or

(2) Perform a fluorescent-penetrant inspection (FPI) of the inner diameter surface forward cone body (forward spacer arm) of the LPT rotor stage 3 disk as specified in paragraphs (l)(1)(i) through (l)(1)(iii) of this AD.

(h) EGT Thermocouple Probe Inspections

(1) Inspect the EGT thermocouple probe for damage within 50 cycles after the effective date of this AD or before accumulating 750 CSLI, whichever occurs later.

(2) Thereafter, re-inspect the EGT thermocouple probe for damage within every 750 CSLI.

(3) If any EGT thermocouple probe shows wear through the thermocouple guide sleeve, remove and replace the EGT thermocouple probe before further flight, and ensure the turbine mid-frame liner does not contact the EGT thermocouple probe.

(i) EGT System Resistance Check Inspections

(1) Perform an EGT system resistance check within 50 cycles from the effective date of this AD or before accumulating 750 cycles since the last resistance check on the EGT system, whichever occurs later.

(2) Thereafter, repeat the EGT system resistance check within every 750 cycles since the last resistance check.

(3) Remove and replace, or repair any EGT system component that fails the resistance system check before further flight.

(j) Ultrasonic Inspection (UI) of the LPT Rotor Stage 3 Disk Forward Spacer Arm

Within 75 cycles after the effective date of this AD, perform a UI of the forward spacer arm of the LPT rotor stage 3 disk. Use Appendix A of GE Service Bulletin (SB) No. CF6-50 S/B 72-1312, Revision 1, dated October 18, 2010, paragraph 4. except for paragraph 4.(12), to do the UI.

(k) Engine Core Vibration Survey

(1) Within 75 cycles after the effective date of this AD, perform an initial engine core vibration survey.

(2) Use about a one-minute acceleration and a one-minute deceleration of the engine between ground idle and 84% N2 (about 8,250 rpm) to perform the engine core vibration survey.

(3) Use a spectral/trim balance analyzer or equivalent to measure the N2 rotor vibration.

(4) If the vibration level is above 5 mils Double Amplitude then, before further flight, remove the engine from service.

(5) For those engines that fail any engine core vibration survey requirements of this AD, then before returning the engine to service:

(i) Remove the LPT rotor stage 3 disk from service; or

(ii) Perform an FPI of the inner diameter surface forward spacer arm of the LPT rotor stage 3 disk as specified in paragraphs (l)(1)(i) through (l)(1)(iii) of this AD.

(6) Thereafter, within every 350 cycles since the last engine core vibration survey, perform the engine core vibration survey as required in paragraphs (k)(1) through (k)(5) of this AD.

(7) If the engine has experienced any vibration reported by maintenance or flight crew that is suspected to be caused by the engine core (N2), perform the engine core vibration survey as required in paragraphs (k)(1) through (k)(5) of this AD within 10 cycles after the report.

(8) Vibration surveys carried out in an engine test cell as part of an engine manual performance run fulfill the vibration survey requirements of paragraphs (k)(2) through (k)(3) of this AD.

(l) Initial and Repetitive FPI of LPT Rotor Stage 3 Disks

(1) At the next shop visit after the effective date of this AD:

(i) Clean the LPT rotor stage 3 disk forward spacer arm, including the use of a wet-abrasive blast, to eliminate residual or background fluorescence.

(ii) Perform an FPI of the LPT rotor stage 3 disk forward spacer arm for cracks and for a band of fluorescence. Include all areas of the disk forward spacer arm and the inner diameter surface forward spacer arm of the LPT rotor stage 3 disk.

(iii) Remove the disk from service before further flight if a crack or a band of fluorescence is present.

(2) Thereafter, clean and perform an FPI of the LPT rotor stage 3 disk forward spacer arm, as specified in paragraphs (l)(1)(i) through (l)(1)(iii) of this AD, at each engine shop visit that occurs after 1,000 cycles since the last FPI of the LPT rotor stage 3 disk forward spacer arm.

(m) Removal of LPT Rotor Stage 3 Disks

Remove LPT rotor stage 3 disks listed in Table 1 from service as follows:

- (1) For disks that have fewer than 3,200 flight cycles since new (CSN) on the effective date of this AD, remove the disk from service before exceeding 6,200 CSN.
- (2) For disks that have 3,200 CSN or more on the effective date of this AD, do the following:
 - (i) If the engine has a shop visit before the disk exceeds 6,200 CSN, remove the disk from service before exceeding 6,200 CSN.
 - (ii) If the engine does not have a shop visit before the disk exceeds 6,200 CSN, remove the disk from service at the next shop visit after 6,200 CSN, not to exceed 3,000 cycles from the effective date of this AD.

(n) Installation Prohibition

- (1) After the effective date of this AD, do not install or reinstall in any engine any LPT rotor stage 3 disk that exceeds the new life limit of 6,200 CSN.
- (2) Remove from service any LPT rotor stage 3 disk that is installed or re-installed after the effective date of this AD, before the disk exceeds the new life limit of 6,200 CSN.

(o) Definitions

- (1) For the purposes of this AD, an EGT above redline is a confirmed over-temperature indication that is not a result of EGT system error.
- (2) For the purposes of this AD, a shift in the smoothed EGT trending data is a shift in a rolling average of EGT readings that can be confirmed by a corresponding shift in the trending of fuel flow or fan speed/core speed (N1/N2) relationship. You can find further guidance about evaluating EGT trend data in GE Company Service Rep Tip 373 "Guidelines For Parameter Trend Monitoring."
- (3) For the purposes of this AD, an engine shop visit is the induction of an engine into the shop after the effective date of this AD, where the separation of a major engine flange occurs; except the following maintenance actions, or any combination, are not considered engine shop visits:
 - (i) Induction of an engine into a shop solely for removal of the compressor top or bottom case for airfoil maintenance or variable stator vane bushing replacement.
 - (ii) Induction of an engine into a shop solely for removal or replacement of the stage 1 fan disk.
 - (iii) Induction of an engine into a shop solely for replacement of the turbine rear frame.
 - (iv) Induction of an engine into a shop solely for replacement of the accessory gearbox or transfer gearbox, or both.
 - (v) Induction of an engine into a shop solely for replacement of the fan forward case.
- (4) For the purposes of this AD, a raw EGT trend data point above the smoothed average is a confirmed temperature reading over the rolling average of EGT readings that is not a result of EGT system error.

(p) Previous Credit

- (1) A BSI performed before the effective date of this AD using AD 2010-06-15, Amendment 39-16240 (75 FR 12661, March 17, 2010) or AD 2010-12-10, Amendment 39-16331 (75 FR 32649, June 9, 2010) or AD 2011-02-07, Amendment 39-16580 (76 FR 6323, February 4, 2011) within the last 75 cycles, satisfies the initial BSI requirement in paragraph (f)(1) of this AD.
- (2) A UI performed before the effective date of this AD using AD 2011-02-07, Amendment 39-16580 (76 FR 6323, February 4, 2011) or GE SB No. CF6-50 S/B 72-1312, dated August 9, 2010 or GE SB No. CF6-50 S/B 72-1312 Revision 1, dated October 18, 2010, satisfies the inspection requirement in paragraph (j) of this AD.

(3) An engine core vibration survey performed before the effective date of this AD using AD 2011-02-07, Amendment 39-16580 (76 FR 6323, February 4, 2011) or GE SB No. CF6-50 S/B 72-1313, dated August 9, 2010 or GE SB No. CF6-50 S/B 72-1313 Revision 1, dated October 18, 2010, within the last 350 cycles, satisfies the initial survey requirement in paragraphs (k)(1) through (k)(5) of this AD.

(4) An FPI of the LPT rotor stage 3 disk forward spacer arm performed before the effective date of this AD using AD 2011-18-01, Amendment 39-16783 (75 FR 52213, August 22, 2011), within the last 1,000 flight cycles of the LPT rotor stage 3 disk, satisfies the initial inspection requirements in paragraphs (l)(1)(i) through (l)(1)(iii) of this AD.

(q) Alternative Methods of Compliance (AMOCs)

(1) AMOCs previously approved for AD 2010-06-15, Amendment 39-16240 (75 FR 12661, March 17, 2010) are not approved for this AD. However, AMOCs previously approved for AD 2010-12-10, Amendment 39-16331 (75 FR 32649, June 9, 2010), AD 2011-02-07, Amendment 39-16580 (76 FR 6323, February 4, 2011), or AD 2011-18-01, Amendment 39-16783 (76 FR 52213, August 22, 2011) are approved for this AD.

(2) The Manager, Engine Certification Office, may approve alternative methods of compliance for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(r) Related Information

(1) For more information about this AD, contact Tomasz Rakowski, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7735; fax: (781) 238-7199; email: tomasz.rakowski@faa.gov.

(2) For service information identified in this AD, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: (513) 552-3272; email: geae.aoc@ge.com. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238-7125.

(s) Material Incorporated by Reference

(1) You must use the following service information to do the UIs required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information on July 22, 2011: General Electric Company Service Bulletin No. CF6-50 S/B 72-1312 Revision 1, dated October 18, 2010.

(2) For service information identified in this AD, contact General Electric Company, GE-Aviation, Room 285, 1 Neumann Way, Cincinnati, OH 45215, phone: (513) 552-3272; email: geae.aoc@ge.com.

(3) You may review copies of the service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call (781) 238-7125.

(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/cfr/ibr_locations.html.

Issued in Burlington, Massachusetts, on January 20, 2012.
Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.



2012-02-08 Aviation Communication & Surveillance Systems, LLC: Amendment 39-16931;
Docket No. FAA-2010-1204; Directorate Identifier 2010-NM-147-AD.

(a) Effective Date

This AD is effective March 13, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Aviation Communication & Surveillance Systems (ACSS) traffic alert and collision avoidance system (TCAS) units with part numbers identified in ACSS Technical Newsletter 8008359, Revision B, dated August 3, 2011, as installed on but not limited to various transport and small airplanes, certificated in any category.

Note 1 to paragraph (c) of this AD: Table 1 of this AD also provides a cross-referenced list of part numbers with associated service bulletins to help operators identify affected parts.

Table 1–Service Bulletin and LRU Cross-Reference

ACCS Product -	Affected LRU Part Numbers (P/Ns) -	ACSS Service Bulletin -
TCAS 3000SP	9003500-10900, -10901, -10902, -55900, -55901, -55902, -57901, -65900, -65901, -65902	8008221-001, Revision 01, dated February 4, 2011 (ATA Service Bulletin 9003500-34-6014)
TCAS 3000SP	9003500-10001, -10002, -10003, -10004, -55001, -55002, -55003, -55004, -65001, -65002, -65003, -65004	8008222-001, Revision 01, dated February 4, 2011 (ATA Service Bulletin 9003500-34-6015)
TCAS 3000SP	9003500-10802	8008223-001, Revision 01, dated February 4, 2011 (ATA Service Bulletin 9003500-34-6016)
TCAS 2000	7517900-10003, -10004, -10006, -10007, -10011, -55003, -55004, -55006, -55007, -55009, -55011, -71003, -71004, -71006, -71007, -71011	8008229-001, Revision 02, dated June 28, 2011 (ATA Service Bulletin 7517900-34-6040)
TCAS II	4066010-910, -912	8008230-001, Revision 02, dated June 28, 2011 (ATA Service Bulletin 4066010-34-6036)

Military TCAS 2000	7517900-56101, -56102, -56104, -56105, 56107	8008231-001, Revision 02, dated June 28, 2011 (ATA Service Bulletin 7517900-34-6041)
T2CAS	9000000-10002, -10003, -10004, -10005, -10006, -10008, -10204, -10205, -10206, -10208, -20002, -20003, -20004, -20005, -20006, -20008, -20204, -20205, -20206, -20208, -55002, -55003, -55004, -55005, -55006, -55008, -55204, -55205, -55206, -55208	8008233-001, Revision 03, dated June 30, 2011 (ATA Service Bulletin 9000000-34-6016)
T2CAS	9000000-10110, -11111	8008234-001, Revision 02, dated June 30, 2011 (ATA Service Bulletin 9000000-34-6017)
TCAS 3000	9003000-10001, -10002, -10003, -55001, -55002, -55003, -65001, -65002, -65003	8008235-001, Revision 02, dated February 3, 2011 (ATA Service Bulletin 9003000-34-6006)
Military TCAS 2000 MASS	7517900-20001, -20002, -65001, -65002	8008236-001, Revision 03, dated June 30, 2011 (ATA Service Bulletin 7517900-34-6042)
Military T2CAS MASS	9000000-30006, -40006, -60006	8008238-001, Revision 02, dated June 30, 2011 (ATA Service Bulletin 9000000-34-6018)

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 34, Navigation.

(e) Unsafe Condition

This AD was prompted by reports of anomalies with TCAS units during a flight test over a high density airport. The TCAS units dropped several reduced surveillance aircraft tracks because of interference limiting. We are issuing this AD to prevent TCAS units from dropping tracks, which could compromise separation of air traffic and lead to subsequent mid-air collisions.

(f) Compliance

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

(g) Upgrade Software

Within 36 months after the effective date of this AD, upgrade software for the ACSS TCAS, in accordance with the Accomplishment Instructions of the applicable ACSS publication identified in table 1 of this AD.

Note 2 to paragraph (g) of this AD: ACSS Service Bulletin 8008233-001 (ATA Service Bulletin 9000000-34-6016), Revision 03, dated June 30, 2011, contains three part numbers (P/Ns 9000000-10007, -20007, and -55007) that were never produced.

(h) Credit for Actions Done in Accordance With Previous Service Information

A software upgrade done before the effective date of this AD in accordance with the applicable service bulletin identified in paragraphs (h)(1) through (h)(13) of this AD is acceptable for compliance with the requirements of paragraph (g) of this AD.

(1) ACSS Service Bulletin 8008221-001 (ATA Service Bulletin 9003500-34-6014), dated May 27, 2010.

(2) ACSS Service Bulletin 8008222-001 (ATA Service Bulletin 9003500-34-6015), dated May 27, 2010.

(3) ACSS Service Bulletin 8008223-001 (ATA Service Bulletin 9003500-34-6016), dated May 27, 2010.

(4) ACSS Service Bulletin 8008229-001 (ATA Service Bulletin 7517900-34-6040), Revision 01, dated September 30, 2010.

(5) ACSS Service Bulletin 8008230-001 (ATA Service Bulletin 4066010-34-6036), Revision 01, dated February 1, 2011.

(6) ACSS Service Bulletin 8008231-001 (ATA Service Bulletin 7517900-34-6041), Revision 01, dated October 15, 2010.

(7) ACSS Service Bulletin 8008233-001 (ATA Service Bulletin 9000000-34-6016), Revision 02, dated February 1, 2011.

(8) ACSS Service Bulletin 8008234-001 (ATA Service Bulletin 9000000-34-6017), Revision 01, dated February 1, 2011.

(9) ACSS Service Bulletin 8008235-001 (ATA Service Bulletin 9003000-34-6006), dated June 4, 2010.

(10) ACSS Service Bulletin 8008236-001 (ATA Service Bulletin 7517900-34-6042), dated May 27, 2010.

(11) ACSS Service Bulletin 8008236-001 (ATA Service Bulletin 7517900-34-6042), Revision 02, dated February 1, 2011.

(12) ACSS Service Bulletin 8008238-001 (ATA Service Bulletin 9000000-34-6018), dated June 4, 2010.

(13) ACSS Service Bulletin 8008238-001 (ATA Service Bulletin 9000000-34-6018), Revision 01, dated February 1, 2011.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Los Angeles Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

For more information about this AD, contact Abby Malmir, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office (ACO), 3960 Paramount Boulevard, Lakewood, California 90712-4137; phone: (562) 627-5351; fax: (562) 627-5210; email: abby.malmir@faa.gov.

(k) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(i) ACSS Service Bulletin 8008221-001, Revision 01, dated February 4, 2011 (ATA Service Bulletin 9003500-34-6014).

(ii) ACSS Service Bulletin 8008222-001, Revision 01, dated February 4, 2011 (ATA Service Bulletin 9003500-34-6015).

(iii) ACSS Service Bulletin 8008223-001, Revision 01, dated February 4, 2011 (ATA Service Bulletin 9003500-34-6016).

(iv) ACSS Service Bulletin 8008229-001, Revision 02, dated June 28, 2011 (ATA Service Bulletin 7517900-34-6040).

(v) ACSS Service Bulletin 8008230-001, Revision 02, dated June 28, 2011 (ATA Service Bulletin 4066010-34-6036).

(vi) ACSS Service Bulletin 8008231-001, Revision 02, dated June 28, 2011 (ATA Service Bulletin 7517900-34-6041).

(vii) ACSS Service Bulletin 8008233-001, Revision 03, dated June 30, 2011 (ATA Service Bulletin 9000000-34-6016).

(viii) ACSS Service Bulletin 8008234-001, Revision 02, dated June 30, 2011 (ATA Service Bulletin 9000000-34-6017).

(ix) ACSS Service Bulletin 8008235-001, Revision 02, dated February 3, 2011 (ATA Service Bulletin 9003000-34-6006).

(x) ACSS Service Bulletin 8008236-001, Revision 03, dated June 30, 2011 (ATA Service Bulletin 7517900-34-6042).

(xi) ACSS Service Bulletin 8008238-001, Revision 02, dated June 30, 2011 (ATA Service Bulletin 9000000-34-6018).

(xii) ACSS Technical Newsletter 8008359, Revision B, dated August 3, 2011.

(2) For service information identified in this AD, contact Aviation Communication & Surveillance Systems, LLC, 19810 North 7th Avenue, Phoenix, Arizona 85027-4741; phone: (623) 445-7040; fax: (623) 445-7004; email: 3com.com>acss.orderadmin@L-3com.com; Internet: <http://www.acss.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 an NARA facility, 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 January 17, 2012.

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



2012-02-09 The Boeing Company: Amendment 39-16932; Docket No. FAA-2011-1171; Directorate Identifier 2011-NM-101-AD.

(a) Effective Date

This AD is effective March 13, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to The Boeing Company Model 737-100, -200, -200C, and -300 series airplanes, certificated in any category; as identified in Boeing Service Bulletin 737-21A1132, Revision 3, dated February 16, 2011.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 21, Air conditioning.

(e) Unsafe Condition

This AD was prompted by a report from the airplane manufacturer that airplanes were assembled with air distribution ducts in the environmental control system (ECS) wrapped with Boeing Material Specification (BMS) 8-39 or Aeronautical Materials Specifications (AMS) 3570 polyurethane foam insulation, a material with fire retardant properties that deteriorate with age. We are issuing this AD to prevent ignition of the BMS 8-39 or AMS 3570 polyurethane foam insulation on the duct assemblies of the ECS due to a potential electrical arc, which could start a small fire and lead to a larger fire that may spread throughout the airplane through the ECS.

(f) Compliance

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

(g) Air Distribution Duct Rework

Within 72 months after the effective date of this AD, rework the applicable duct assemblies in the ECS specified in and in accordance with the Accomplishment Instructions and Appendix A of Boeing Service Bulletin 737-21A1132, Revision 3, dated February 16, 2011.

(h) Credit for Actions Accomplished in Accordance With Previous Service Information

Reworking the applicable duct assemblies in the ECS in accordance with the Accomplishment Instructions and Appendix A of Boeing Service Bulletin 737-21A1132, Revision 2, dated June 13, 2007, before the effective date of this AD is acceptable for compliance with the corresponding actions required by paragraph (g) of this AD.

(i) Parts Installation

As of the effective date of this AD, no person may install an ECS duct assembly with BMS 8-39 or AMS 3570 polyurethane foam insulation on any airplane.

(j) Alternative Methods of Compliance (AMOCs)

(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. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be emailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Kimberly A. DeVoe, Aerospace Engineer, Cabin Safety and Environmental Systems Branch, ANM-150S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue SW., Renton, Washington 98057-3356; phone: 425-917-6495; fax: (425) 917-6590; email: Kimberly.Devoe@faa.gov.

(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; phone: 206-544-5000, extension 1; fax: 206-766-5680; email: me.boecom@boeing.com; Internet: <https://www.myboeingfleet.com>. You may review copies of the referenced 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.

(l) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of the following service information:

(i) Boeing Service Bulletin 737-21A1132, Revision 3, dated February 16, 2011.

(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; email me.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

(3) You may review copies of the referenced 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/cfr/ibr-locations.html>.

Issued in Renton, Washington, on January 12, 2012.

Michael Kaszycki,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2012-02-11 Rolls-Royce plc: Amendment 39-16934; Docket No. FAA-2009-0994; Directorate Identifier 2009-NE-39-AD.

(a) Effective Date

This airworthiness directive (AD) is effective March 6, 2012.

(b) Affected ADs

This AD supersedes AD 2011-11-08, Amendment 39-16707 (76 FR 30529, May 26, 2011).

(c) Applicability

This AD applies to Rolls-Royce plc RB211-535E4-37, -535E4-B-37, -535E4-B-75, and -535E4-C-37 turbofan engines.

(d) Unsafe Condition

This AD was prompted by our determination that the definition of “shop visit” in the existing AD is too restrictive, in that it would require operators to inspect more often than required to ensure safety. We are issuing this AD to revise the definition of shop visit and to detect cracks in the low-pressure (LP) turbine stage 1, 2, and 3 discs, which could result in an uncontained release of LP turbine blades and damage to the airplane.

(e) Compliance

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

(1) Initial Inspection Requirements

At the next engine shop visit after the effective date of this AD, perform a visual and a fluorescent penetrant inspection of the LP turbine stage 1, 2, and 3 discs.

(2) Repeat Inspection Requirements

At each engine shop visit after accumulating 1,500 cycles since the last inspection of the LP turbine stage 1, 2 and 3 discs, repeat the inspections specified in paragraph (e)(1) of this AD.

(3) Remove Cracked Discs

If you find cracks, remove the disc from service.

(f) Definitions

For the purpose of this AD, an “engine shop visit” is induction of an engine into the shop for any purpose where:

- (1) All the blades are removed from the high-pressure (HP) compressor discs and the HP turbine disc, or
- (2) All the blades are removed from the intermediate pressure turbine disc.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request.

(h) Related Information

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

(2) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0244, dated November 9, 2009, and Rolls-Royce plc Alert Service Bulletin No. RB.211-72-AG272 for related information. Contact Rolls-Royce plc, P.O. Box 31, Derby, DE24 8BJ, United Kingdom; phone: 011 44 1332 242424, fax: 011 44 1332 249936; or email: http://www.rollsroyce.com/contact/civil_team.jsp, for a copy of this service information or download the publication from <https://www.aeromanager.com>.

(i) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on January 25, 2012.

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



2012-02-12 Bombardier, Inc.: Amendment 39-16935. Docket No. FAA-2012-0037; Directorate Identifier 2012-NM-003-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective February 15, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes; certificated in any category; serial numbers 4095 through 4391 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 24: Electrical Power.

(e) Reason

This AD was prompted by multiple reports of the loss of certain alternating current (AC) systems caused by a burnt AC power wire bundle. We are issuing this AD to prevent the loss of ice protection systems for the angle of attack vanes, pitot probes, engine inlets, and windshields, and consequent loss of or misleading airspeed indication and increased workload for the flight crew, which could lead to loss of control of the airplane.

(f) Compliance

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

(g) Inspection and Corrective Actions

Within 400 flight hours or 60 days, whichever occurs first, after the effective date of this AD, do the actions specified in paragraphs (g)(1) and (g)(2) of this AD.

(1) Do a detailed inspection of the affected AC power wire bundle for damage (any foreign object damage (FOD), damage due to sharp bends and kinking or deterioration, insulation cracking, evidence of heat damage to the insulation, and chafing) and do all applicable repairs, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-24-52, dated November 22, 2011. Do all applicable repairs before further flight.

(2) Segregate the AC power wire bundle into two bundles and install Teflon tubing, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-24-52, dated November 22, 2011.

(h) Other FAA AD Provisions

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. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it 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, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding 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.

(i) Related Information

Refer to MCAI Canadian Airworthiness Directive CF-2011-46, dated December 20, 2011; and Bombardier Service Bulletin 84-24-52, dated November 22, 2011; for related information.

(j) Material Incorporated by Reference

(1) You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise. The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information under 5 U.S.C. 552(a) and 1 CFR part 51:

(i) Bombardier Service Bulletin 84-24-52, dated November 22, 2011.

(2) For Bombardier, Inc. service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone (416) 375-4000; fax (416) 375-4539; email thd.qseries@aero.bombardier.com; Internet <http://www.bombardier.com>.

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

(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 an NARA facility, 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 January 23, 2012.

Kalene C. Yanamura,
Acting Manager, Transport Airplane Directorate,
Aircraft Certification Service.



DATE: February 6, 2012

AD #: 2012-03-51

Emergency airworthiness directive (AD) 2012-03-51 is sent to owners and operators of certain airplanes originally manufactured by Lockheed for the military as P2V airplanes.

Background

This emergency AD was prompted by a report of a significant crack in the principle wing structure on a Neptune Aviation Service, Inc. Model SP-2H (P2V-7) airplane. A crack approximately 24 inches long was found in the left side wing front spar and lower skin just outboard of the fuselage side of wing station 40. The crack propagated through the wing front spar web, lower chord, and wing lower skin through stringer No. 22 and aft to stringer No. 21. The cause of the cracking is unknown at this time. This condition, if not detected and corrected, could result in significant loss of structural integrity of the wing.

FAA's Determination

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

AD Requirements

This AD requires cleaning of the forward lower spar cap between wing stations 40 and 84.5 (right and left), and doing a detailed inspection for cracks, working fasteners, and other anomalies, including surface damage in the form of a nick, gouge, or corrosion; and repairing if necessary. The AD also requires sending inspection results (both positive and negative) to the FAA.

Interim Action

We consider this AD interim action. If final action is later identified, we might consider further rulemaking then.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, Section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Presentation of the Actual AD

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

2012-03-51 Lockheed (Original Manufacturer): Directorate Identifier 2012-NM-018-AD.

(a) Effective Date

This Emergency AD is effective upon receipt.

(b) Affected ADs

None.

(c) Applicability

All of the airplanes identified in paragraphs (c)(1), (c)(2), (c)(3), (c)(4), (c)(5), (c)(6), and (c)(7) of this AD, certificated in any category:

(1) Aero Union Corporation Model SP-2H (P2V-7) airplanes;

(2) Central Air Service, Inc. Model SP-2H (P2V-7) airplanes;

(3) Evergreen Air Center Model SP-2H (P2V-7) airplanes;

(4) Hawkins and Powers Aviation, Inc. Model HP-P2V-7 airplanes;

(5) Minden Air Corp Model SP-2H (P2V-7) airplanes;

(6) Neptune Aviation Service, Inc. Model SP-2H (P2V-7) airplanes; and

(7) USDA Forest Service (type certificate previously held by U.S. Department of Agriculture) Model P2V-5F (SP-2E) airplanes.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 57, Wings.

(e) Unsafe Condition

This AD was prompted by a report of a significant crack in the principle wing structure on a Neptune Aviation Service, Inc. Model SP-2H (P2V-7) airplane. We are issuing this AD to detect and correct cracks, working fasteners, and other anomalies in the principle wing structure, which could cause significant loss of structural integrity of the wing.

(f) Compliance

Comply with this AD within the compliance times specified.

(g) Inspections

Within one day after receipt of this AD: Do the actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD.

(1) Gain access to the wing spar box between wing stations 40 and 84.5 (right and left sides of the airplane) through an access panel that allows for inspecting the forward lower spar cap assembly and remove or reposition any internal fuel bladder assembly that impedes access.

(2) Clean the exposed surface of the forward lower spar cap between wing stations 40 and 84.5 (right and left), and do a detailed inspection for cracks, working fasteners, and other anomalies, including surface damage in the form of a nick, gouge, or corrosion, of the forward lower spar cap between wing stations 40 and 84.5 (right and left).

(3) If any crack, working fastener, or other anomaly is found during any inspection required by paragraph (g)(2) of this AD, before further flight, repair in accordance with a method approved by the Manager, Denver Aircraft Certification Office (ACO), FAA. For a repair method to be approved by the Manager, Denver ACO, as required by this paragraph, the Manager's approval letter must specifically refer to this AD.

(h) Definition

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

(i) Reporting

Within 10 days after doing the inspection required by paragraph (g) of this AD: Submit a report of the findings (both positive and negative) of the inspections required by paragraph (g) of this AD to the Denver ACO, FAA, Attention: Roger Caldwell, 26805 East 68th Ave., Denver, CO 80249; phone: 303-342-1086; fax: 303-342-1088; e-mail: roger.caldwell@faa.gov. The report must include a detailed figure or picture of all cracks and damage and the location, orientation, and size of all cracks and damage. The report must also include the airplane serial number, the number of landings and flight hours on the airplane, and a description of how the airplane is operated (e.g., firefighting, photography, etc.).

(j) Paperwork Reduction Act Burden Statement

A federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW, Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(k) Special Flight Permit

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 unless approved in accordance with the procedures specified in paragraph (l) of this AD.

(l) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Denver ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(m) Related Information

For further information about this AD, contact: Roger Caldwell, Aerospace Engineer, Denver Aircraft Certification Office, FAA, 26805 East 68th Avenue, Denver, CO 80249; phone: 303-342-1086; fax: 303-342-1088; e-mail: roger.caldwell@faa.gov.

Issued in Renton, Washington, on February 6, 2012.

Original signed by:

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