



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2010-09

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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

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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

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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency

Biweekly 2010-09

2010-08-02		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, -200 SU, ERJ 190-100 STD, -100 LR, -100 IGW, -100 ECJ, -200 STD, -200 LR, and -200 IGW
2010-08-03	S 2009-04-11	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-08-05		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343, A340-311, -312, and -313
2010-08-06		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW
2010-08-07		Airbus	A340-541 and -642
2010-08-08		Airbus	A330-243, -341, -342, and -343
2010-09-08		General Electric Company	Engine: CJ610 series turbojet and CF700



2010-08-02 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-16257.
Docket No. FAA-2007-28377; Directorate Identifier 2007-NM-063-AD.

Effective Date

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

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes; and Model ERJ 190-100 STD, -100 LR, -100 IGW, -100 ECJ, -200 STD, -200 LR, and -200 IGW airplanes; certificated in any category; equipped with firewall hydraulic shutoff valves having part number (P/N) 975287-3 or P/N 975287-5.

Subject

- (d) Air Transport Association (ATA) of America Code 29: Hydraulic power.

Reason

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

Periodic operational check of the firewall hydraulic shutoff valves [FWSOV], made during routine maintenance, has revealed that the failure rate of that component is significantly higher than expected. Such a dormant failure, when combined with further possible failures, such as engine fire, may lead to an unacceptable reduction of safety margins.

The unsafe condition is failure of the firewall hydraulic shutoff valve, which, in combination with an engine fire, could result in the spread of an engine fire beyond the firewall. The MCAI requires repetitive operational checks of the firewall hydraulic shutoff valve, and if necessary, replacement of the valve.

Actions and Compliance

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

(1) Within the next 600 flight hours after the effective date of this AD, perform an operational test for proper operation of the firewall hydraulic shutoff valves P/N 975287-3 or P/N 975287-5, as applicable, in accordance with the applicable service bulletin listed in Table 1 of this AD. If the valve

fails the operational test, as described in the applicable service bulletin listed in Table 1 of this AD, before further flight, replace the faulty hydraulic shutoff valve with another one bearing P/N 975287-3 or P/N 975287-5. Repeat the test thereafter at intervals that do not exceed 600 flight hours.

Note 1: For the purpose of this AD, an operational test is: "A task to determine that an item is fulfilling its intended purpose. The test does not require quantitative tolerances. This is a failure finding task."

Table 1 - EMBRAER Service Information

EMBRAER Service Bulletin -	Revision -	Dated -
170-29-0013	Original	December 13, 2006
170-29-0013	01	July 24, 2007
190-29-0008	Original	December 13, 2006
190-29-0008	01	July 24, 2007

(2) Replacing a firewall hydraulic shutoff valve having P/N 975287-3 or P/N 975287-5 with a valve having P/N 975287-7, in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 190-29-0021 or 170-29-0024, both dated December 22, 2008, as applicable, terminates the requirements of paragraph (f)(1) of this AD for that valve.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows: A final solution has been identified since the MCAI were issued and we are providing it as an optional terminating action in this AD. This difference has been coordinated with Agência Nacional de Aviação Civil (ANAC).

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, ANM-116, International Branch, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Kenny Kaulia, Aerospace Engineer, International Branch, ANM-116, FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, Washington 98057-3356; telephone (425) 227-2848; 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 Brazilian Airworthiness Directives 2007-02-01R2 and 2007-02-02R2, both effective July 17, 2009; and the service information listed in Table 2 of this AD; for related information.

Table 2 - EMBRAER Service Information

EMBRAER Service Bulletin -	Revision -	Dated -
170-29-0013	Original	December 13, 2006
170-29-0013	01	July 24, 2007
170-29-0024	Original	December 22, 2008
190-29-0008	Original	December 13, 2006
190-29-0008	01	July 24, 2007
190-29-0021	Original	December 22, 2008

Material Incorporated by Reference

(i) You must use the applicable service information specified in Table 3 of this AD to do the actions required by this AD, unless the AD specifies otherwise. If you accomplish the optional actions specified by this AD, you must use EMBRAER Service Bulletin 190-29-0021, dated December 22, 2008; or EMBRAER Service Bulletin 170-29-0024, dated December 22, 2008; as applicable; to perform those actions, unless the AD specifies otherwise.

Table 3 – Material Incorporated by Reference for actions required by this AD

EMBRAER Service Bulletin -	Revision -	Dated -
170-29-0013	Original	December 13, 2006
170-29-0013	01	July 24, 2007
190-29-0008	Original	December 13, 2006
190-29-0008	01	July 24, 2007

EMBRAER Service Bulletin 170-29-0013, Revision 01, contains the following effective pages:

Page number	Revision level shown on page	Date shown on page
1–5, 10	01	July 24, 2007.
6–9	Original	December 13, 2006.

EMBRAER Service Bulletin 190-29-0008, Revision 01, contains the following effective pages:

Page number	Revision level shown on page	Date shown on page
1–5, 10	01	July 24, 2007.
6–9	Original	December 13, 2006.

(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 Empresa Brasileira de Aeronautica S.A. (EMBRAER), Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170–Putim–12227-901 São Jose dos Campos–SP–BRASIL; telephone: +55 12 3927-5852 or +55 12 3309-0732; fax: +55 12 3927-7546; e-mail: distrib@embraer.com.br; Internet: <http://www.flyembraer.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.



2010-08-03 Bombardier, Inc: Amendment 39-16258. Docket No. FAA-2009-1068; Directorate Identifier 2009-NM-042-AD.

Effective Date

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

Affected ADs

- (b) This AD supersedes AD 2009-04-11, Amendment 39-15817.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, serial numbers 7003 and subsequent, certificated in any category, that are equipped with Thales angle of attack (AOA) transducers having part number (P/N) 45150340 or C16258AA.

Subject

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

Reason

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

The heating capability of several Angle Of Attack (AOA) transducer heating elements removed from in-service aircraft have been found to be below the minimum requirement. Also, it was discovered that a large number of AOA transducers repaired in an approved maintenance facility were not calibrated accurately.

Inaccurate calibration of the AOA transducer and/or degraded AOA transducer heating elements can result in early or late activation of the stall warning, stick shaker and stick pusher by the Stall Protection Computer (SPC).

This [Canadian] directive mandates a periodic inspection of the inrush current to verify the AOA heating capability and replacement of the inaccurately calibrated AOA transducers.

The unsafe condition is reduced controllability of the airplane. This AD retains the requirements of AD 2009-04-11 and also requires a one-time inspection of certain AOA transducers, replacement of transducers having certain serial numbers, repetitive inspections of the inrush current for certain AOA transducers, and replacement of inaccurately calibrated AOA transducers.

Restatement of Requirements of AD 2009-04-11, With No Changes

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

(1) For airplanes equipped with a transducer having accumulated more than 7,500 total flight hours as of March 9, 2009 (the effective date of AD 2009-04-11): Within 250 flight hours after March 9, 2009, measure the inrush current of both AOA transducers in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008.

(i) If both AOA transducers are found to have an inrush current of 1.60 amps or more, repeat the measurement thereafter at intervals not to exceed the applicable interval specified in Table 1 of this AD. Do the measurement in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008.

Table 1 - Repetitive Measurement Intervals

If the last inrush current measurement of the serviceable AOA transducer is -	Then repeat the measurement -
More than or equal to 1.90 amps	Within 2,000 flight hours after the last measurement.
More than or equal to 1.80 amps but less than 1.90 amps	Within 1,500 flight hours after the last measurement.
More than or equal to 1.70 amps but less than 1.80 amps	Within 1,000 flight hours after the last measurement.
More than or equal to 1.60 amps but less than 1.70 amps	Within 500 flight hours after the last measurement.

(ii) If one AOA transducer is found to have an inrush current below 1.60 amps, and the other AOA transducer is found to have an inrush current of 1.60 amps or more: Do the actions required by paragraphs (f)(1)(ii)(A) and (f)(1)(ii)(B) of this AD.

(A) For the AOA transducer having an inrush current of 1.60 amps or more: Repeat the measurement thereafter at intervals not to exceed the applicable interval specified in Table 1 of this AD. Do the measurement in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008.

(B) For the AOA transducer having an inrush current below 1.60 amps ("degraded" transducer): Within 1,000 flight hours after March 9, 2009, replace that transducer in accordance with Part C of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008. At the applicable time specified in Table 1 of this AD if the degraded transducer was replaced with a serviceable transducer, or within 2,000 flight hours after replacement if the degraded transducer was replaced with a new transducer, do the measurement for that replacement transducer and repeat the measurements thereafter at intervals not to exceed the applicable interval specified in Table 1 of this AD. Do the measurement in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008.

(iii) If both AOA transducers are found to have an inrush current below 1.60 amps, do the action specified in paragraph (f)(1)(iii)(A) or (f)(1)(iii)(B) of this AD.

(A) Before further flight, replace one of the degraded AOA transducers with a new or serviceable transducer; and replace the other degraded transducer with a new or serviceable transducer within 1,000 flight hours after the measurement required by paragraph (f)(1) of this AD; in accordance with Part C of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008. At the applicable time specified in Table 1 of this AD, if the degraded transducer was replaced with a serviceable transducer; or within 2,000 flight hours after replacement if the degraded transducer was replaced with a new transducer: Do the measurement for that replacement transducer and repeat the measurement thereafter at intervals not to exceed the applicable interval specified in Table 1 of this AD. Do the measurements in accordance with Part A of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008.

(B) Within 1,000 flight hours after the measurement required by paragraph (f) of this AD, replace both degraded AOA transducers with new or serviceable transducers in accordance with Part C of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008. Until the replacement is done, dispatch with two degraded AOA transducers is allowed, provided that the applicable Limitations section of the airplane flight manual (AFM) is revised to include the following statement or a copy of this AD is inserted into the applicable Limitations section of the AFM.

"Dispatch is allowed if:

(a) Operations are not conducted in visible moisture (including standing water and slush) in any form,

(b) Operations are not conducted in known or forecast icing conditions,

(c) Both Ice Detection Systems are operative; and,

(d) Operations are conducted in day VMC conditions only."

After the replacement has been accomplished, the statement or the copy of this AD may be removed from the AFM. At the applicable time specified in Table 1 of this AD, if the degraded transducer was replaced with a serviceable transducer; or within 2,000 flight hours after replacement with a new transducer: Do the measurement for that replacement transducer and repeat the measurement thereafter at intervals not to exceed the applicable interval specified in Table 1 of this AD. Do the measurement in accordance with Part A of Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008.

(2) If, during any repetitive measurement required by paragraphs (f)(1)(i), (f)(1)(ii), and (f)(1)(iii) of this AD, any AOA transducer is found to have an inrush current below 1.60 amps, before further flight, replace that transducer in accordance with Part C of the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008. At the applicable time specified in Table 1 of this AD, if the degraded transducer was replaced with a serviceable transducer; or within 2,000 flight hours after replacement if the degraded transducer was replaced with a new transducer: Do the measurement for that replacement transducer as specified in paragraph (f)(1)(ii)(B) of this AD and repeat the measurement thereafter at intervals not to exceed the applicable interval specified in Table 1 of this AD.

(3) Actions done before March 9, 2009, in accordance with Bombardier Service Bulletin 601R-27-153, dated October 17, 2008, are acceptable for compliance with the corresponding requirements of paragraphs (f)(1) and (f)(2) of this AD.

New Requirements of This AD: Actions and Compliance

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

(1) For airplanes equipped with a transducer having accumulated 7,500 or fewer flight hours as of March 9, 2009, except transducers that have been measured in accordance with paragraph (f)(1) of this AD: Do the actions specified in paragraph (f)(1) of this AD before the transducer accumulates

7,500 total flight hours, or within 500 flight hours after the effective date of this AD, whichever occurs later.

(2) Within 900 flight hours after the effective date of this AD, inspect AOA transducers having P/N 45150340 or C16258AA to determine the serial numbers. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the AOA transducer can be conclusively determined from that review.

(i) If the serial number is not identified in paragraph 1.A.(1) of Bombardier Service Bulletin 601R-27-154, dated December 1, 2008, no further action is required by this paragraph.

(ii) If the part number and serial number are identified in one of the tables in paragraph 1.A.(1) of Bombardier Service Bulletin 601R-27-154, dated December 1, 2008, and have the suffix "A," no further action is required by this paragraph.

Note 1: Bombardier Service Bulletin 601R-27-154, dated December 1, 2008, references Thales Avionics Service Bulletins 45150340-31-004 and C16258A-27-002, both dated November 28, 2008, as additional sources of guidance for part and serial number information.

(iii) If the part number and serial number are identified in a table in paragraph 1.A.(1) of Bombardier Service Bulletin 601R-27-154, dated December 1, 2008, before further flight, replace the AOA transducer with a new or serviceable transducer, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 601R-27-154, dated December 1, 2008.

(3) As of the effective date of this AD, no person may install a replacement AOA transducer having P/N 45150340 or P/N C16258AA with a serial number identified in paragraph 1.A.(1) of Bombardier Service Bulletin 601R-27-154, dated December 1, 2008, unless the serial number has the suffix "A."

FAA AD Differences

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

Other FAA AD Provisions

(h) 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

(i) Refer to MCAI Canadian Airworthiness Directive CF-2008-35, dated December 22, 2008; Bombardier Service Bulletin 601R-27-154, dated December 1, 2008; and Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008; for related information.

Material Incorporated by Reference

(j) You must use Bombardier Service Bulletin 601R-27-154, dated December 1, 2008; and Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference of Bombardier Service Bulletin 601R-27-154, dated December 1, 2008, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) The Director of the Federal Register previously approved the incorporation by reference of Bombardier Service Bulletin 601R-27-153, Revision A, dated December 16, 2008, on March 9, 2009 (74 FR 7789, February 20, 2009).

(3) 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>.

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

(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 25, 2010.

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



2010-08-05 Airbus: Amendment 39-16260. Docket No. FAA-2009-1108; Directorate Identifier 2009-NM-131-AD.

Effective Date

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

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Airbus Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; and Airbus Model A340-311, -312, and -313 airplanes; certificated in any category; all manufacturer serial numbers; modified in production by modifications identified in both paragraphs (c)(1) and (c)(2) of this AD; excluding those on which Airbus Modification 57744 has been embodied in production.

(1) Airbus Modification 40379; and

(2) One of the following Airbus modifications, as applicable:

(i) For Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes: Modification 49894, 51304, 52048, 52712, 53559, 53732, 54115, 55632, or 55722.

(ii) For Model A340-311, A340-312, and A340-313 airplanes: Modification 51603, 53400, or 55024.

Subject

- (d) Air Transport Association (ATA) of America Code 92.

Reason

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

It was noticed in production that in the area between frame (FR) C53.9 and FR C55 RH [right-hand], the distance between the route 9R of the In-Flight Entertainment system and the wire harness for the Lower Deck-Mobile Crew Rest system provisions is too small.

This limited distance may cause chafing between the affected electrical harness 6581VB and the harness 5495VB or 6938VB.

This condition, if not corrected, could lead to the short circuit of wires dedicated to oxygen, which, in case of emergency, could result in a large number of passenger oxygen masks not being supplied with oxygen, possibly causing personal injuries.

For the reasons described above, this AD requires the installation of a stirrup on the terminal block 5507VT between FR53.9 and FR54, and the re-routing of the wiring route 9R.

Actions and Compliance

(f) Within 24 months after the effective date of this AD, unless already done: Install a stirrup on the terminal block 5507VT between FR53.9 and FR54 and modify the wiring route 9R in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-92-3080, dated November 12, 2008; or Airbus Mandatory Service Bulletin A340-92-4080, dated November 12, 2008; as applicable.

FAA AD Differences

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

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. 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 2009-0076, dated April 6, 2009; Airbus Mandatory Service Bulletin A330-92-3080, dated November 12, 2008; and Airbus Mandatory Service Bulletin A340-92-4080, dated November 12, 2008; for related information.

Material Incorporated by Reference

(i) You must use Airbus Mandatory Service Bulletin A330-92-3080, dated November 12, 2008; or Airbus Mandatory Service Bulletin A340-92-4080, dated November 12, 2008; as applicable; to do the actions required by this AD, unless the AD specifies otherwise.

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

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

(3) You may review copies of the service information 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 April 1, 2010.

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



2010-08-06 Empresa Brasileira de Aeronautica S.A. (EMBRAER): Amendment 39-16261.
Docket No. FAA-2009-1231; Directorate Identifier 2009-NM-212-AD.

Effective Date

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

Affected ADs

(b) None.

Applicability

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

(1) Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes, serial numbers 17000002, 17000004 through 17000013 inclusive, and 17000015 through 17000235 inclusive.

(2) Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes, serial numbers 19000002, 19000004, 19000006 through 19000108 inclusive, 19000110 through 19000139 inclusive, 19000141 through 19000158 inclusive, 19000160 through 19000176 inclusive, 19000178 through 19000202 inclusive, 19000204 through 19000213 inclusive, and 19000215.

Subject

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

Reason

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

It has been found the possibility of missing points of sealant application on the vapor barrier assembly in the wing stub rear box. In the event of fuel tank leak in this region associated with an unsealed vapor barrier assembly, migration of flammable vapors and fluids to middle electronic bay may occur, which then could lead to an uncontained fire event if the flammable vapors finds an ignition source.

* * * * *

The required actions include a detailed inspection for gaps, voids, or holes in the sealant. Corrective actions include applying sealant into any gaps, voids, or holes.

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.

Actions

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

(1) Within 6,000 flight hours or 24 months after the effective date of this AD, whichever occurs first, do a detailed inspection of the vapor barrier assembly in the wing stub rear box for missing sealant which forms gaps, voids or holes, in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 170-57-0036, dated March 13, 2009 (for Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes); or EMBRAER Service Bulletin 190-57-0027, dated March 18, 2009 (for Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes).

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 mirror, magnifying lenses, etc., may be necessary. Surface cleaning and elaborate access procedures may be required."

(2) If the vapor barrier sealant is found to be correctly applied in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 170-57-0036, dated March 13, 2009 (for Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes); or EMBRAER Service Bulletin 190-57-0027, dated March 18, 2009 (for Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes); no further action is required by this AD.

(3) If any vapor barrier sealant is found missing (gaps, voids or holes) during the inspection required by paragraph (g)(1) of this AD, before further flight apply sealant into the applicable gaps, voids, and holes, in accordance with the Accomplishment Instructions of EMBRAER Service Bulletin 170-57-0036, dated March 13, 2009 (for Model ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU airplanes); or EMBRAER Service Bulletin 190-57-0027, dated March 18, 2009 (for Model ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW airplanes).

FAA AD Differences

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

Other FAA AD Provisions

(h) 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: Kenny Kaulia, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601

Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2848; 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

(i) Refer to MCAI Brazilian Airworthiness Directives 2009-07-01 and 2009-07-02, both effective July 13, 2009; EMBRAER Service Bulletin 170-57-0036, dated March 13, 2009; and EMBRAER Service Bulletin 190-57-0027, dated March 18, 2009; for related information.

Material Incorporated by Reference

(j) You must use EMBRAER Service Bulletin 170-57-0036, dated March 13, 2009; or EMBRAER Service Bulletin 190-57-0027, dated March 18, 2009; 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 Empresa Brasileira de Aeronautica S.A. (EMBRAER), Technical Publications Section (PC 060), Av. Brigadeiro Faria Lima, 2170–Putim–12227-901 São Jose dos Campos–SP–BRASIL; telephone: +55 12 3927-5852 or +55 12 3309-0732; fax: +55 12 3927-7546; e-mail: distrib@embraer.com.br; Internet: <http://www.flyembraer.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 April 1, 2010.

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



2010-08-07 Airbus: Amendment 39-16262. Docket No. FAA-2010-0282; Directorate Identifier 2009-NM-140-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective April 29, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to all Airbus Model A340-541 and -642 airplanes, certificated in any category, all manufacturer serial numbers.

Subject

- (d) Air Transport Association (ATA) of America Code 29: Hydraulic power.

Reason

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

Following successive ECAM [electronic centralized aircraft monitoring] warnings during the approach phase, just after the landing gear extension sequence and an uneventful landing, the maintenance inspection on an Airbus A340 has revealed an hydraulic leak that was caused by the failure of the Yellow high pressure (HP) hydraulic pipe supplying the back-up Nose Wheel Steering (NWS) which runs along the lower part of the avionic bay from frame 17 to frame 20.

This leak resulted in the loss of the Yellow hydraulic system and contamination of the avionics bay with sprayed hydraulic fluid.

This condition, if not detected and corrected, could result in an ingestion of hydraulic fluid in the electrical connectors, which could generate an arcing phenomenon and, if sufficient energy is provided by the arcing, lead to an ignition source, which would be an unsafe condition.

This AD requires the repetitive [detailed] inspection [for damage (e.g., chafing)] of the Yellow HP hydraulic line from frame 17 to the elbow connection near frame 20, the application of the associated corrective actions, as necessary, and the repetitive performance of a bleeding of the NWS system to verify the correct installation and condition of the HP hydraulic line.

Required actions also include a detailed inspection for missing or damaged P-clamps including their grommets. Corrective actions include replacing damaged or missing P-clamp grommets and replacing P-clamps. If any P-clamp grommet is found missing or damaged, inspecting the hydraulic pipe under damaged P-clamps for chafing is required.

Actions and Compliance

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

(1) At the applicable time specified in paragraph (f)(1)(i) or (f)(1)(ii) of this AD: Perform a detailed inspection for missing or damaged P-clamps, including their grommets, in accordance with the instructions of Airbus All Operators Telex A340-29A5014, dated October 14, 2008.

(i) If the airplane has accumulated 1,000 total flight cycles or more as of the effective date of this AD: Within 100 flight cycles after the effective date of this AD.

(ii) If the airplane has accumulated fewer than 1,000 total flight cycles as of the effective date of this AD: Within 250 flight cycles after the effective date of this AD.

(2) If any P-clamp grommet is found missing or damaged during the inspection required by paragraph (f)(1) of this AD: Perform a detailed inspection of the hydraulic pipe under the damaged P-clamp for signs of damage (including bulging and chafing) in accordance with the instructions of Airbus All Operators Telex A340-29A5014, dated October 14, 2008. If the damage exceeds the applicable tolerance specified in paragraph (f)(2)(i) and (f)(2)(ii) of this AD, repair before further flight in accordance with Airbus All Operators Telex A340-29A5014, dated October 14, 2008.

Note 1: Guidance on repairing damage to the hydraulic pipe under the damaged P-clamp as specified in paragraph (f)(2) of this AD is in AMM Task 20-23-11 of the Airbus A340-600 Aircraft Maintenance Manual.

(i) For sharp-bottomed damage: 0.033 mm (0.001 inch) maximum depth.

(ii) For round-bottomed damage: 0.066 mm (0.003 inch) maximum depth.

(3) If any P-clamp or grommet is found missing or damaged during the inspection required by paragraph (f)(1) of this AD, before further flight, replace the P-clamp, in accordance with the instructions of Airbus All Operators Telex A340-29A5014, dated October 14, 2008.

(4) At the applicable time specified in paragraph (f)(4)(i) or (f)(4)(ii) of this AD: Perform a detailed inspection to detect damage (including bulging and chafing) of the yellow high pressure hydraulic line from frame 17 to the elbow connection near frame 20, in accordance with the instructions of Airbus All Operators Telex A340-29A5014, dated October 14, 2008. If any damage is detected, before further flight, repair the pipeline in accordance with the instructions of Airbus All Operators Telex A340-29A5014, dated October 14, 2008.

Note 2: Guidance on repairing damage to the hydraulic pipe under the damaged P-clamp as specified in paragraph (f)(2) of this AD is in Task 20-23-11 of the Airbus A340-600 Aircraft Maintenance Manual.

(i) If the airplane has accumulated 1,000 total flight cycles or more as of the effective date of this AD: Within 100 flight cycles after the effective date of this AD.

(ii) If the airplane has accumulated fewer than 1,000 total flight cycles as of the effective date of this AD: Within 250 flight cycles after the effective date of this AD.

(5) At the same time as accomplishing the actions required by paragraphs (f)(1) and (f)(4) of this AD: Perform a bleeding of the nose wheel steering system, in accordance with the instructions of Airbus All Operators Telex A340-29A5014, dated October 14, 2008.

(6) Repeat the inspection required by paragraphs (f)(1) and (f)(4) of this AD and the bleeding of the nose wheel steering system required by paragraph (f)(5) of this AD at intervals not to exceed 500 flight cycles.

(7) At the applicable time in paragraph (f)(7)(i) or (f)(7)(ii) of this AD, submit a report of the findings (both positive and negative) of the inspections required by paragraphs (f)(1) and (f)(4) of this AD to Airbus Customer Services, Engineering and Technical Support, ATTN: Mr. C. DUPHIL, SEEL4, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone: +33/(0)5 61 93 40 05; fax: +33/(0)5 61 67 19 12 05; e-mail: christophe.duphil@airbus.com.

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

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

FAA AD Differences

Note 3: This AD differs from the MCAI and/or service information as follows: Although the MCAI does not tell you to submit information to Airbus, paragraph (f)(7) of this AD specifies that such submittal is required.

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Vladimir Ulyanov, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1138; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. 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 (EASA) Airworthiness Directive 2009-0130, dated June 23, 2009; and Airbus All Operators Telex A340-29A5014, dated October 14, 2008; for related information.

Material Incorporated by Reference

(i) You must use Airbus All Operators Telex A340-29A5014, dated October 14, 2008, to do the actions required by this AD, unless the AD specifies otherwise. (The issue date of Airbus All Operators Telex A340-29A5014 is indicated only on the first page of the document.)

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

(2) For service information identified in this AD, contact Airbus SAS—Airworthiness Office—EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; e-mail: airworthiness.A330-A340@airbus.com; 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 April 1, 2010.

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



2010-08-08 Airbus: Amendment 39-16263. Docket No. FAA-2010-0391; Directorate Identifier 2010-NM-073-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective April 29, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Airbus Model A330-243, -341, -342, and -343 airplanes, certificated in any category, all manufacturer serial numbers equipped with Rolls-Royce Trent 700 engines, on which Airbus modification 56966MP16199 has been embodied in production or Airbus Service Bulletin A330-28-3105 has been embodied in service.

Subject

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

Reason

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

During a recent in-service event the flight crew of a Trent 700 powered A330 aircraft reported a temporary Engine Pressure Ratio (EPR) shortfall on engine 2 during the take-off phase of the flight. The ENG STALL warning was set. The flight crew followed the standard procedures which included reducing throttle to idle. The engine recovered and provided the demanded thrust level for the remainder of the flight.

Data analysis confirmed a temporary fuel flow restriction and subsequent recovery, and indicated that also engine 1 experienced a temporary fuel flow restriction shortly after the initial event on engine 2, again followed by a full recovery. The engine 1 EPR shortfall was insufficient to trigger any associated warning and was only noted through analysis of the flight data. No flight crew action was necessary to recover normal performance on this engine. The remainder of the flight was uneventful.

Based on previous industry-wide experience, the investigation of the event has focused on the possibility for ice to temporarily restrict the fuel flow. While no direct fuel system fault has been identified, the operation of the water scavenge system at Rib 3 cannot be excluded as being a contributory factor.

Testing and analysis are continuing to identify the root cause of the event.

The scenario of ice being shed and causing a temporary blockage in the engine fuel system may lead to a temporary fuel flow restriction to the engine. This may result in a possible engine surge or stall condition, and in the engine not being able to provide the commanded thrust.

Therefore, as a precautionary measure to reduce the possibility of ingesting ice into the engine fuel feed system, this AD requires to:

–Deactivate the automatic Standby Fuel Pump Scavenge System, which operates during Taxi and Take-off by removing relays Functional Item Numbers (FIN) 80QA1 and 80QA2 (this will not affect normal standby pump operation) for aeroplanes identified in the applicability section of this AD and on which this deactivation has not been performed in production through the modification 200801, and

–Prohibit the dispatch with * * * [a] MAIN Fuel Pump inoperative on all aeroplanes identified in the applicability section of this AD.

This AD also requires revising the Limitations section of the airplane flight manual to advise the flight crew of the dispatch prohibition.

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.

Actions

(g) For airplanes on which Airbus modification 200801 has not been embodied in production as of the effective date of this AD: Within 10 days after the effective date of this AD, deactivate the water scavenge automatic operation by removing relays FIN 80QA1 (left-hand) and 80QA2 (right-hand), in accordance with the instructions in Airbus All Operators Telex A330-28A3114, Revision 1, dated March 24, 2010.

(h) Deactivation before the effective date of this AD in accordance with Airbus All Operators Telex A330-28A3114, dated March 10, 2010, is considered acceptable for compliance with the corresponding action required by paragraph (g) of this AD.

(i) For airplanes on which Airbus modification 200801 has not been embodied in production as of the effective date of this AD: Before further flight after accomplishment of the requirements of paragraph (g) of this AD, dispatch of an airplane with any inoperative main fuel pump is prohibited.

(j) For airplanes on which Airbus modification 200801 has been embodied in production as of the effective date of this AD: Dispatch of an airplane with any inoperative main fuel pump is prohibited as of the effective date of this AD.

(k) For all airplanes: At the applicable time specified in paragraph (k)(1) or (k)(2) of this AD, revise the Limitations section of the airplane flight manual (AFM) to include the following statement. This may be done by inserting a copy of this AD into the AFM.

"Dispatch with any inoperative main fuel pump is prohibited."

(1) For airplanes on which Airbus modification 200801 has not been embodied in production as of the effective date of this AD: Revise the AFM before further flight after accomplishment of the requirements of paragraph (g) of this AD.

(2) For airplanes on which Airbus modification 200801 has been embodied in production as of the effective date of this AD: Revise the AFM before further flight after the effective date of this AD.

Note 1: When a statement identical to that in paragraph (k) of this AD has been included in the general revisions of the AFM, the general revisions may be inserted into the AFM, and the copy of this AD may be removed from the AFM.

FAA AD Differences

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

Other FAA AD Provisions

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

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

(m) Refer to MCAI European Aviation Safety Agency (EASA) Emergency Airworthiness Directive 2010-0042-E, dated March 12, 2010; and Airbus All Operators Telex A330-28A3114, Revision 1, dated March 24, 2010; for related information.

Material Incorporated by Reference

(n) You must use Airbus All Operators Telex A330-28A3114, Revision 1, dated March 24, 2010, as applicable, to do the actions required by this AD, unless the AD specifies otherwise. (The document number, revision level, and date of this document are indicated only on the first page of the document; no other page of the document contains this information.)

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

(2) For service information identified in this AD, contact Airbus SAS–Airworthiness Office–EAL, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 36 96; fax +33 5 61 93 45 80; e-mail airworthiness.A330-A340@airbus.com; 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 April 1, 2010.

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



2010-09-08 General Electric Company (GE): Amendment 39-16273. Docket No. FAA-2009-0502; Directorate Identifier 2009-NE-02-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective May 28, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to GE CJ610 series turbojet and CF700 series turbofan engines with AFT Technologies combustion liner, part number (P/N) AFT-5016T30G02, installed. These engines are installed on, but not limited to, Learjet Inc. model 24 series and model 25 series airplanes, Dassault Aviation Fan Jet Falcon series airplanes, and Sabreliner Corporation NA-265-70 and NA-265-80 series airplanes.

Unsafe Condition

(d) This AD results from a report of an AFT Technologies combustion liner that released a large section of the inner combustion liner and reports of six combustion liners with premature cracks. We are issuing this AD to prevent premature cracks in the combustion liner, which could release pieces of the inner combustion liner. A release of pieces of the inner combustion liner could cause an uncontained failure of the engine turbine and damage to the airplane.

Compliance

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

Replacement of AFT Technologies Combustion Liner P/N AFT-5016T30G02

(f) For engines that have an AFT Technologies combustion liner, P/N AFT-5016T30G02, with fewer than 200 hours-since-new (HSN) or 300 cycles-since-new (CSN), remove the AFT Technologies combustion liner, P/N AFT-5016T30G02, before exceeding 200 HSN or 300 CSN, whichever occurs first.

(g) For engines that have an AFT Technologies combustion liner, P/N AFT-5016T30G02, with 200 HSN or more or 300 CSN or more, remove the AFT Technologies combustion liner, P/N AFT-

5016T30G02, within 15 hours-in-service or 10 cycles-in-service, after the effective date of this AD, whichever occurs first.

(h) After the effective date of this AD, don't install any AFT Technologies combustion liner, P/N AFT-5016T30G02, in any engine.

Alternative Methods of Compliance

(i) The Manager, New York 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.

Related Information

(j) Contact Norman Perenson, Aerospace Engineer, New York Aircraft Certification Office, FAA, Engine & Propeller Directorate, 1600 Stewart Avenue, Suite 410, Westbury, NY 11590; e-mail: norman.perenson@faa.gov; telephone (516) 228-7337; fax (516) 794-5531, for more information about this AD.

Material Incorporated by Reference

(k) None.

Issued in Burlington, Massachusetts, on April 19, 2010.

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

[FR Doc. 2010-9376 Filed 4-22-10; 8:45 am]

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