



**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES  
LARGE AIRCRAFT**

**BIWEEKLY 2010-13**

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U.S. Department of Transportation  
Federal Aviation Administration  
Regulatory Support Division  
Delegation and Airworthiness Programs Branch, AIR-140  
P. O. Box 26460  
Oklahoma City, OK 73125-0460  
FAX 405-954-4104



## 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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<b>Biweekly 2010-03</b>			
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
<b>Biweekly 2010-04</b>			
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
<b>Biweekly 2010-05</b>			
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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<b>Biweekly 2010-06</b>			
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
<b>Biweekly 2010-07</b>			
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
<b>Biweekly 2010-08</b>			
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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<b>Biweekly 2010-09</b>			
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
<b>Biweekly 2010-10</b>			
2002-23-20	COR	Dassault Aviation	900EX, Mystere Falcon 900
2010-01-04	COR, S 2009-24-11	General Electric Company	Engine: CF34-1A, CF34-3A, CF34-3A1, CF34-3A2, CF34-3B, and CF34-3B1
2010-06-04	COR	Airbus	A300 B2-1C, A300 B2-203, A300 B2K-3C, A300 B4-103, A300 B4-203, and A300 B4-2C, A310-203, A310-204, A310-221, A310-222, A310-304, A310-322, A310-324, and A310-325, A300 B4-601, A300 B4-603, A300 B4-605R, A300 B4-620, A300 B4-622, and A300 B4-622R
2010-09-02		British Aerospace Regional Aircraft	Jetstream Series 3101 and Jetstream Model 3201
2010-09-03		Boeing	747-200B
2010-09-04		Honeywell International Inc.	Appliance: Primus EPIC and Primus APEX flight management systems (FMS)
2010-09-05	S 2010-06-51	Boeing	737-600, -700, -700C, -800, -900, and -900ER
2010-09-06		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900)
2010-09-07		Bombardier, Inc.	DHC-8-400, -401, and -402
2010-09-10	S 2003-04-21 R!	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2010-09-11	S 93-01-11	BAE Systems (Operations) Limited	BAe 146-100A, -200A, and -300A series airplanes, and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-09-12		McDonnell Douglas Corporation	Model DC-10-10, DC-10-10F, DC-10-15, DC-10-30, DC-10-30F (KC-10A and KDC-10), DC-10-40, DC-10-40F, MD-10-10F, MD-10-30F, MD-11, and MD-11F
2010-09-14	S 2009-01-01	CFM International, S.A.	Engine: CFM56-5B1/P, -5B2/P, -5B3/P, -5B3/P1, -5B4/P, -5B5/P, -5B6/P, -5B7/P, -5B8/P, -5B9/P, -5B1/2P, -5B2/2P, -5B3/2P, -5B3/2P1, -5B4/2P, -5B4/P1, -5B6/2P, -5B4/2P1, and -5B9/2P
2010-10-04		Bombardier, Inc.	DHC-8-400, -401, and -402

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<b>Biweekly 2010-11</b>			
2009-26-09	COR	General Electric Company	Engine: CF34-1A, -3A, -3A1, -3A2, -3B, and -3B1
2010-10-05	S 94-12-04	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-300, 747SR, and 747SP
2010-10-07		Empresa Brasileira de Aeronautica S.A.	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU, ERJ 190-100 ECJ, -100 LR, -100 IGW, -100 STD, -200 STD, -200 LR, and -200 IGW
2010-10-08		Airbus	A318-111, -112, -121, and -122 airplanes; Model 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
2010-10-11		Empresa Brasileira de Aeronautica S.A.	EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP
2010-10-13		BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-10-18		Bombardier, Inc.	BD-100-1A10 (Challenger 300)
2010-10-19	S 2010-02-03	Airbus	A340-211, -212, -213, -311, -312, and -313
2010-10-20		McDonnell Douglas	DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-33F, DC-9-34, DC-9-34F, and DC-9-32F (C-9A, C-9B), DC-9-41, and DC-9-51
2010-10-21		Bombardier, Inc.	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2010-10-22	S 2005-23-12	BAE Systems	BAe 146-100A, -200A, and -300A series airplanes; and Model Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2010-10-23	S 70-16-02	Dowty Propellers	R175/4-30-4/13; R175/4-30-4/13e; R184/4-30-4/50; R193/4-30-4/50; R193/4-30-4/61; R193/4-30-4/64; R193/4-30-4/65; R193/4-30-4/66; R.209/4-40-4.5/2; R212/4-30-4/22; R.245/4-40-4.5/13; R257/4-30-4/60; and R.259/4-40-4.5/17
2010-10-24		Dassault Aviation	FALCON 2000 and FALCON 2000EX
2010-10-25		Airbus	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
2010-10-26	S 2007-14-02	Bombardier, Inc.	CL-600-1A11 (CL-600), CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A, CL-601-3R, and CL-604)
2010-11-02	S 2007-03-05	Gulfstream Aerospace LP	100 airplanes; and Model Astra SPX and 1125 Westwind
2010-11-03		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F airplanes; and Model A310-203, -204, -221, -222, -304, -322, -324, and -325

### Biweekly 2010-12

2006-09-11	COR	Airbus	A319-111, -112, -113, -114, -115, -131, -132, and -133 airplanes; Model A320-211, -212, -214, -231, -232, and -233 airplanes; Model A321-111, -112, and -131 airplanes; and Model A321-211 and -231
2010-11-01		Embraer	EMB-135BJ, -135ER, -135KE, -135KL, -135LR, -145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes, certificated in any category, all serial numbers, except Model EMB-145LR
2010-11-12	S 99-25-14	McDonnell Douglas	MD-11 and MD-11F
2010-11-13		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, -200 LR, -200 STD, and -200 SU
2010-11-14		Embraer	ERJ 190-100 STD, -100 LR, -100 IGW, -200 STD, -200 LR, and -200 IGW

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<b>Biweekly 2010-13</b>			
2010-10-17	S 97-25-02, 2000-02-05, 2006-15-07, 2006-17-01	Mitsubishi Heavy Industries, Ltd.	See AD
2010-11-11		Learjet Inc	60
2010-12-03		CFM International	Engine: CFM56-3 and -3B
2010-12-05	S 2009-06-18	Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702)
2010-12-06		Bombardier, Inc	DHC-8-400, DHC-8-401, and DHC-8-402
2010-12-07		Embraer	EMB-135ER, -135KE, -135KL, and -135LR airplanes; and EMBRAER Model EMB-145, -145ER, -145MR, -145LR, - 145XR, -145MP, and -145EP
2010-12-08		Airbus	A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, and F4-622R airplanes; Model C4-605R Variant F airplanes; and Model A310-203, -204, -221, -222, -304, -322, -324, and -325
2010-12-09		Honeywell International	Appliance: APU
2010-12-10	S 2010-06-15	General Electric	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50C2-F, CF6-50C2-R, CF6-50E, CF6-50E1, and CF6-50E2



**FAA**  
**Aviation Safety**

## AIRWORTHINESS DIRECTIVE

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

**2010-10-17 Mitsubishi Heavy Industries, Ltd.:** Amendment 39-16296; Docket No. FAA-2009-1076; Directorate Identifier 2009-CE-019-AD.

### Effective Date

(a) This AD becomes effective on July 22, 2010.

### Affected ADs

(b) This AD supersedes AD 97-25-02, Amendment 39-10225; AD 2000-02-25, Amendment 39-11543; AD 2006-15-07, Amendment 39-14687; and AD 2006-17-01, Amendment 39-14722.

### Applicability

(c) This AD applies to the following airplane models and serial numbers that are certificated in any category:

**Table 1—Mitsubishi Heavy Industries, Ltd., (MHI) Airplanes Listed in Type Certificate Data Sheet (TCDS) A10SW**

<b>Models</b>	<b>Serial Numbers</b>
MU-2B-25, MU-2B-26, MU-2B-26A, MU-2B-36A, MU-2B-40, and MU-2B-60	All serial numbers
MU-2B-35 and MU-2B-36	There are no serial numbers for MU-2B-35 or MU-2B-36 under TCDS A10SW.

**Table 2—MHI Airplanes Listed in TCDS A2PC**

<b>Models</b>	<b>Serial Numbers</b>
MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, MU-2B-36	All serial numbers

### Unsafe Condition

(d) This AD results from inconsistencies in critical operating procedures between the MU-2B specific training, the FAA-accepted pilot operating checklists, and the airplane flight manuals (AFM). MHI revised the AFMs to align them with the information in that training and the checklists. We are issuing this AD to correct inconsistencies in critical operating procedures between the MU-2B specific training, the FAA-accepted pilot operating checklists, and the AFMs, which, if not corrected, could result in pilots inadvertently taking inappropriate actions in critical operating conditions.

## Compliance

(e) Do the following unless already done:

(1) Within 100 hours time-in-service (TIS) after September 22, 2006 (the effective date retained from AD 2006-17-01), inspect the engine torque indication system and, before further flight after the inspection, recalibrate the torque pressure transducers as required. For airplanes listed in TCDS A2PC, follow MHI MU-2 Service Bulletin No. 233A, dated January 14, 1999 or MHI MU-2 Service Bulletin No. 233B, dated March 8, 2007. For airplanes listed in TCDS A10SW, follow MHI MU-2 Service Bulletin No. 095/77-002, dated July 15, 1998. This inspection requires the use of the following power assurance charts as applicable:

(i) If you have not incorporated the AFM revisions required in paragraph (e)(2) of this AD: Use the power assurance charts referenced in Table 3 below; or

(ii) If you have already incorporated the AFM revisions required in paragraph (e)(2) of this AD: Use the power assurance charts in section 6 of the revised AFMs required by paragraph (e)(2) of this AD.

**Table 3 — Power Assurance Chart from AD 2006-17-01**

<b>TCDS</b>	<b>Airplane Model Affected</b>	<b>Date and Version of AFM</b>	<b>Page Number from AFM</b>
A2PC	MU-2B	AFM, Section 6, Reissued March 5, 1987, Revision 9, dated January 14, 1999	6-34
	MU-2B-10	AFM, Section 6, Reissued March 5, 1987, Revision 9, dated January 14, 1999	6-19
	MU-2B-15	AFM, Section 6, Reissued March 5, 1987, Revision 9, dated January 14, 1999	6-19
	MU-2B-20	AFM, Section 6, Reissued March 3, 1987, Revision 9, dated January 14, 1999	6-20
	MU-2B-25	AFM, Section 6, Reissued March 3, 1987, Revision 9, dated January 14, 1999	6-19
	MU-2B-26	AFM, Section 6, Reissued March 3, 1987, Revision 9, dated January 14, 1999	6-19
	MU-2B-30	AFM, Section 6, Reissued February 19, 1987, Revision 10, dated January 14, 1999	6-19
	MU-2B-35	AFM, Section 6, Reissued February 19, 1987, Revision 10, dated January 14, 1999	6-19
	MU-2B-36	AFM, Section 6, Reissued February 19, 1987, Revision 9, dated January 14, 1999	6-20

A10SW	MU-2B-25	AFM, Section 6, Reissued March 25, 1986	6-18 and 6-19
	MU-2B-26	AFM, Section 6, Reissued March 25, 1986	6-17 and 6-18
	MU-2B-26A	AFM, Section 6, Reissued March 25, 1986	6-17 and 6-18
	MU-2B-36A	AFM, Section 6, Reissued February 28, 1986	6-20 and 6-21
	MU-2B-40	AFM, Section 6, Reissued March 25, 1986	6-17 and 6-18
	MU-2B-60	AFM, Section 6, Reissued September 24, 1986	6-19 and 6-20

(2) Within the next 50 hours TIS after July 22, 2010 (the effective date of this AD) or within the next 6 months after July 22, 2010 (the effective date of this AD), whichever occurs first, incorporate all revisions up to and including the latest revisions as published in the list of effective pages of the applicable AFM listed in Table 4 and Table 5 of this AD. Assure that the applicable AFM contains each page, matching all the page numbers and page dates, listed in the Effective Pages listing for that AFM. The airplane identification data plate identifies the type certificate number for that airplane:

**Table 4—TCDS A10SW**

<b>Airplane Model</b>	<b>AFM Name</b>	<b>Effective Pages List</b>
MU-2B-25	MU-2B-25 Airplane Flight Manual K Model, Document Number MR-0156-1	all revised pages up to and including revision 11, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26	MU-2B-26 Airplane Flight Manual M Model, Document Number MR-0160-1	all revised pages up to and including revision 11, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26A	MU-2B-26A Airplane Flight Manual P Model, Document Number MR-0194-1	all revised pages up to and including revision 13, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-36A	MU-2B-36A Airplane Flight Manual N Model, Document Number MR-0196-1	all revised pages up to and including revision 15, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-40	MU-2B-40 Airplane Flight Manual SOLITAIRE Model, Document Number MR-0271-1	all revised pages up to and including revision 13, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-60	MU-2B-60 Airplane Flight Manual MARQUISE Model, Document Number MR-0273-1	all revised pages up to and including revision 15, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM

**Table 5–TCDS A2PC**

<b>Airplane Model</b>	<b>AFM Name</b>	<b>Effective Pages List</b>
MU-2B	MU-2B Airplane Flight Manual, YET 67026A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-10	MU-2B-10 Airplane Flight Manual, YET 86400	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-15	MU-2B-15 Airplane Flight Manual, YET 68038A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-20	MU-2B-20 Airplane Flight Manual, YET 68034A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-25	MU-2B-25 Airplane Flight Manual, YET 71367A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26	MU-2B-26 Airplane Flight Manual, YET 74129A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-30	MU-2B-30 Airplane Flight Manual, YET 69013A	all revised pages up to and including revision 14, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-35	MU-2B-35 Airplane Flight Manual, YET 70186A	all revised pages up to and including revision 14, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-36	MU-2B-36 Airplane Flight Manual, YET 74122A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM

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

(f) The Manager, FAA, Fort Worth Airplane Certification Office (ACO), has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Al Wilson, Flight Test Pilot, FAA, Fort Worth ACO, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone: (817) 222-5146; fax: (817) 222-5960. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

## Material Incorporated by Reference

(g) You must use Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 233A, dated January 14, 1999; Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 095/77-002, dated July 15, 1998; Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 233B, dated March 8, 2007; and the AFMs specified in Table 6 of this AD to do the actions required by this AD, unless the AD specifies otherwise. The AFMs and Pilot's Operating Manuals (POMs) are bound together in one book for each airplane model; however, only the AFMs are required to comply with this AD. The POMs are not approved data and are not incorporated by reference; the POMs are not required to comply with this AD.

(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) On September 22, 2006 (71 FR 47699, August 18, 2006) the Director of the Federal Register approved the incorporation by reference of Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 095/77-002, dated July 15, 1998; and Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 233A, dated January 14, 1999.

(3) For service information identified in this AD, contact Mitsubishi Heavy Industries America, Inc., 4951 Airport Parkway, Suite 800, Addison, Texas 75001; telephone: (972) 934-5480; fax: (972) 934-5488; Internet: <http://www.mu-2aircraft.com> or <http://www.turbineair.com>.

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

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

**Table 6—Material Incorporated by Reference**

<b>AFM Name</b>	<b>Effective Pages List</b>
MU-2B-25 Airplane Flight Manual K Model, Document Number MR-0156-1	all revised pages up to and including revision 11, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26 Airplane Flight Manual M Model, Document Number MR-0160-1	all revised pages up to and including revision 11, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26A Airplane Flight Manual P Model, Document Number MR-0194-1	all revised pages up to and including revision 13, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-36A Airplane Flight Manual N Model, Document Number MR-0196-1	all revised pages up to and including revision 15, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-40 Airplane Flight Manual SOLITAIRE Model, Document Number MR-0271-1	all revised pages up to and including revision 13, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM

MU-2B-60 Airplane Flight Manual MARQUISE Model, Document Number MR-0273-1	all revised pages up to and including revision 15, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B Airplane Flight Manual, YET 67026A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-10 Airplane Flight Manual, YET 86400	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-15 Airplane Flight Manual, YET 68038A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-20 Airplane Flight Manual, YET 68034A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-25 Airplane Flight Manual, YET 71367A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26 Airplane Flight Manual, YET 74129A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-30 Airplane Flight Manual, YET 69013A	all revised pages up to and including revision 14, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-35 Airplane Flight Manual, YET 70186A	all revised pages up to and including revision 14, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-36 Airplane Flight Manual, YET 74122A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM

Issued in Kansas City, Missouri on May 4, 2010.

Wes Ryan,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.



**2010-11-11 Learjet Inc.:** Amendment 39-16316. Docket No. FAA-2009-0495; Directorate Identifier 2009-NM-049-AD.

## Effective Date

(a) This airworthiness directive (AD) is effective July 13, 2010.

## Affected ADs

(b) None.

## Applicability

(c) This AD applies to Learjet Inc. Model 60 airplanes, certificated in any category, serial numbers 60-002 through 60-369 inclusive.

## Subject

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

## Unsafe Condition

(e) This AD results from a report of the main landing gear tires blowing out during a takeoff roll. The Federal Aviation Administration is issuing this AD to prevent tire failure, which could result in failures of the braking and thrust reverser systems. In a critical phase of operation such as takeoff, loss of airplane control may result.

## 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.

## Revise the Maintenance Manual (MM)

(g) Within 14 days after the effective date of this AD, revise the Tire-Servicing Section of the Learjet 60 MM to include the information in Learjet 60 Temporary Revision (TR) 12-16, dated March 18, 2009.

Note 1: The actions required by paragraph (g) of this AD may be done by inserting a copy of Learjet 60 TR 12-16, dated March 18, 2009, into the Learjet 60 MM. When the TR has been included in general revisions of the Learjet 60 MM, the general revisions may be inserted in the MM, provided the relevant information in the general revision is identical to that in the TR.

### **Revise the Airplane Flight Manual (AFM)**

(h) Within 14 days after the effective date of this AD, revise the Tires Limitations Section of the Learjet 60 AFM or Learjet 60XR AFM, as applicable, to include the information in the Learjet 60 Temporary Flight Manual Change (TFMC) 2009-03, dated March 9, 2009. Thereafter, operate the airplane according to the limitations and procedures in the TFMC.

Note 2: The actions required by paragraph (h) of this AD may be done by inserting a copy of Learjet 60 TFMC 2009-03, dated March 9, 2009, into the Learjet 60 AFM or Learjet 60XR AFM, as applicable. When Learjet 60 TFMC 2009-03 has been included in general revisions of the applicable AFM, the general revisions may be inserted in the applicable AFM, provided the relevant information in the general revision is identical to that in the TFMC.

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

(i)(1) The Manager, Wichita Aircraft Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Don Ristow, Aerospace Engineer, Mechanical Systems and Propulsion Branch, ACE-116W, Wichita Aircraft Certification Office, FAA, 1801 Airport Road, Room 100, Mid-Continent Airport, Wichita, Kansas 67209; telephone (316) 946-4120; fax (316) 946-4107.

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

### **Material Incorporated by Reference**

(j) You must use Learjet 60 Temporary Revision 12-16, dated March 18, 2009, to the Learjet 60 Maintenance Manual; and Learjet 60 Temporary Flight Manual Change 2009-03, dated March 9, 2009, to the Learjet 60 or Learjet 60XR Airplane Flight Manual; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. (The issue date of Learjet 60 Temporary Flight Manual Change 2009-03 is specified 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 Learjet, Inc., One Learjet Way, Wichita, Kansas 67209-2942; telephone 316-946-2000; fax 316-946-2220; e-mail [ac.ict@aero.bombardier.com](mailto:ac.ict@aero.bombardier.com); Internet <http://www.bombardier.com>.

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

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

Issued in Renton, Washington, on April 1, 2010.

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



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**2010-12-03 CFM International, S.A.:** Amendment 39-16324. Docket No. FAA-2009-0606;  
Directorate Identifier 2009-NE-11-AD.

[[Page 32263]]

## Effective Date

(a) This airworthiness directive (AD) becomes effective July 13, 2010.

## Affected ADs

(b) None.

## Applicability

(c) This AD applies to CFM International, S.A. models CFM56-3 and -3B turbofan engines with 25 degrees midspan shroud fan blades, part numbers (P/Ns) 9527M99P08, 9527M99P09, 9527M99P10, 9527M99P11, 1285M39P01, or fan blade pairs, P/Ns 335-088-901-0, 335-088-902-0, 335-088-903-0, and 335-088-904-0 installed. These engines are installed on, but not limited to, Boeing 737 series airplanes.

(d) CFM International, S.A. has added to the basic engine model number on the engine nameplate to identify minor variations in engine configuration, installation components, or reduced ratings peculiar to aircraft installation requirements.

(e) Those engines marked on the engine data plate as CFM56-3-B1 are included in this AD as CFM56-3 turbofan engines.

(f) Those engines marked on the engine data plate as CFM56-3B-2 are included in this AD as CFM56-3B turbofan engines.

## Unsafe Condition

(g) This AD results from a report of a failed fan blade with severe out-of-limit wear on the underside of the blade platform where it contacts the damper. We are issuing this AD to prevent failure of multiple fan blades, which could result in an uncontained failure of the engine and damage to the airplane.

## Compliance

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

## **Inspection for Wear**

(i) Within 900 cycles-in-service after the effective date of this AD, perform an on-wing or in-shop inspection of the fan blade and damper for wear. Use paragraphs 3.A.(1) through 3.A.(5) or paragraphs 3.B.(1) through 3.B.(5) respectively, of the Accomplishment Instructions of CFM International Service Bulletin (SB) No. CFM56-3/3B/3C S/B 72-1067, dated February 15, 2007.

(j) If you find out-of-limit wear on at least one fan blade platform underside, perform the additional inspections and disposition the parts, as specified in paragraphs 3.A.(3) and 3.A.(5) or paragraphs 3.B.(3) and 3.B.(5) respectively, of the Accomplishment Instructions of CFM International SB No. CFM56-3/3B/3C S/B 72-1067, dated February 15, 2007.

(k) Thereafter, within intervals not to exceed 3,000 cycles-since-last inspection, perform an on-wing or in-shop inspection for wear. Use paragraphs 3.A.(1) through 3.A.(5) or paragraphs 3.B.(1) through 3.B.(5) respectively, of the Accomplishment Instructions of CFM International SB No. CFM56-3/3B/3C S/B 72-1067, dated February 15, 2007.

(l) If you find wear on at least one fan blade platform underside, perform additional inspections and disposition the parts, as specified in paragraphs 3.A.(3) and 3.A.(5) or paragraphs 3.B.(3) and 3.B.(5) respectively, of the Accomplishment Instructions of CFM International SB No. CFM56-3/3B/3C S/B 72-1067, dated February 15, 2007.

## **Installation Prohibition**

(m) After the effective date of this AD, don't install any 25 degrees midspan shroud fan blades, P/Ns 9527M99P08, 9527M99P09, 9527M99P10, 9527M99P11, 1285M39P01, or fan blade pairs, P/Ns 335-088-901-0, 335-088-902-0, 335-088-903-0, and 335-088-904-0, unless they have passed an inspection specified in paragraph 3. of the Accomplishment Instructions of CFM International SB No. CFM56-3/3B/3C S/B 72-1067, dated February 15, 2007.

## **Optional Terminating Action**

(n) Replacing the 25 degrees midspan shroud fan blade set with a 37 degrees midspan shroud fan blade set terminates the repetitive inspection requirements specified in paragraph (k) of this AD.

## **Alternative Methods of Compliance**

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

## **Related Information**

(p) Contact Antonio Cancelliere, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: antonio.cancelliere@faa.gov; telephone (781) 238-7751; fax (781) 238-7199, for more information about this AD.

(q) European Aviation Safety Agency AD 2009-0036, dated February 20, 2009, also addresses the subject of this AD.

**Material Incorporated by Reference**

(r) You must use CFM International Service Bulletin No. CFM56-3/3B/3C S/B 72-1067, dated February 15, 2007, to perform the inspections and parts dispositions required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact CFM International, S. A., Technical Publication Department, 1 Neumann Way, Cincinnati, OH 45215; telephone (513) 552-2800; fax (513) 552-2816, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on May 25, 2010.

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



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**2010-12-05 Bombardier, Inc.:** Amendment 39-16326. Docket No. FAA-2009-1033; Directorate Identifier 2009-NM-104-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective July 12, 2010.

**Affected ADs**

- (b) This AD supersedes AD 2009-06-18, Amendment 39-15855.

**Applicability**

(c) This AD applies to Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, having serial numbers (S/Ns) 10004 and subsequent; and Model CL-600-2D15 (Regional Jet Series 705) airplanes and Model CL-600-2D24 (Regional Jet Series 900) airplanes, having S/N 15002 and subsequent; certificated in any category.

**Subject**

- (d) Air Transport Association (ATA) of America Code 24: Electrical power.

**Reason**

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

Following in-flight test deployments on CL-600-2B19 aircraft, several Air-Driven generators (ADGs) failed to come online. Investigation revealed that, as a result of a wiring anomaly that had not been detected during ADG manufacture, a short circuit was possible between certain internal wires and their metallic over-braided shields, which could result in the ADG not providing power when deployed. This directive mandates checking of the ADG and modification of the ADG internal wiring, if required. It also prohibits future installation of unmodified ADGs.

The unsafe condition is failure of the ADG, which could lead to loss of several functions essential for safe flight.

## Restatement of Requirements of AD 2009-06-18, With No Changes

### Actions and Compliance

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

(1) For airplanes identified in Table 1 of this AD: Within 12 months after April 30, 2009 (the effective date of AD 2009-06-18), inspect the serial number of the installed ADG. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the ADG can be conclusively determined from that review.

**Table 1 – Bombardier Airplane Identification**

<b>Model</b>	<b>Serial Number</b>
CL-600-2C10 airplanes	10004 through 10265
CL-600-2D15 and CL-600-2D24 airplanes	15002 through 15162

(i) If the serial number is not listed in paragraph 1.A of Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006, no further action is required by this AD.

(ii) If the serial number is listed in paragraph 1.A of Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006 ("the service bulletin"), within 12 months after April 30, 2009, inspect the ADG identification plate and, as applicable, do the actions of paragraph (f)(1)(ii)(A) or (f)(1)(ii)(B) of this AD.

(A) If the identification plate is marked with the symbol "24-2," no further action is required by this AD.

(B) If the identification plate is not marked with the symbol "24-2," modify the ADG wiring in accordance with the Accomplishment Instructions of the service bulletin.

(2) For all Model CL-600-2C10 airplanes having S/N 10004 and subsequent, and Model CL-600-2D15 and CL-600-2D24 airplanes having S/N 15002 and subsequent: As of April 30, 2009, no ADG part number 604-90800-19 (761339E), having S/N 0101 through 0132, 0134 through 0167, 0169 through 0358, 0360 through 0438, 0440 through 0456, 0458 through 0467, 0469, 0471 through 0590, 0592 through 0597, 0599 through 0745, 0747 through 1005, or 1400 through 1439, may be installed on any airplane, unless the identification plate of the ADG is identified with the symbol "24-2."

Note 1: Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006, refers to Hamilton Sundstrand Service Bulletin ERPS10AG-24-2, dated February 19, 2004, for further guidance on identifying the symbol "24-2."

(3) Actions done before April 30, 2009, according to Bombardier Service Bulletin 670BA-24-015, dated May 17, 2004, are considered acceptable for compliance with the corresponding actions specified in paragraph (f)(1) of this AD, provided the ADG has not been replaced since those actions were done.

### New Requirements of This AD

#### Actions and Compliance

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

(1) For airplanes identified in Table 2 of this AD: Within 12 months after the effective date of this AD, inspect the serial number of the installed ADG. A review of airplane maintenance records is acceptable in lieu of this inspection if the serial number of the ADG can be conclusively determined from that review.

**Table 2 – Additional Bombardier Airplane Identification**

<b>Model</b>	<b>Serial Number</b>
CL-600-2C10 airplanes	10266 through 10273 inclusive
CL-600-2D15 and CL-600-2D24 airplanes	15163 through 15223 inclusive

(i) If the serial number is not listed in paragraph 1.A of Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006, no further action is required by this AD.

(ii) If the serial number is listed in paragraph 1.A of Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006 ("the service bulletin"), within 12 months after the effective date of this AD, inspect the ADG identification plate and, as applicable, do the actions of paragraph (g)(1)(ii)(A) or (g)(1)(ii)(B) of this AD.

(A) If the identification plate is marked with the symbol "24-2", no further action is required by this AD.

(B) If the identification plate is not marked with the symbol "24-2", modify the ADG wiring in accordance with the Accomplishment Instructions of the service bulletin.

(2) Actions done before the effective date of this AD according to Bombardier Service Bulletin 670BA-24-015, dated May 17, 2004, are considered acceptable for compliance with the corresponding actions specified in paragraph (g)(1) of this AD, provided the ADG has not been replaced since those actions were done.

**FAA AD Differences**

Note 2: This AD differs from the MCAI and/or service information as follows: The MCAI specifies to inspect Model CL-600-2C10 airplanes having S/Ns 10004 through 10265 inclusive and Model CL-600-2D15 and CL-600-2D24 airplanes having S/Ns 15002 through 15162 inclusive. This AD also specifies to inspect Model CL-600-2C10 airplanes having S/Ns 10266 through 10273, and Model CL-600-2D15 and CL-600-2D24 airplanes having S/Ns 15163 through 15223 inclusive.

**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, 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. AMOCs

approved previously in accordance with AD 2009-06-18, Amendment 39-15855, are approved as AMOCs for the corresponding provisions of 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-2008-10, dated February 5, 2008; and Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006; for related information.

### **Material Incorporated by Reference**

(j) You must use Bombardier Service Bulletin 670BA-24-015, Revision A, dated December 18, 2006, to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register previously approved the incorporation by reference of Bombardier Service Bulletin 607BA-24-015, Revision A, dated December 18, 2006, on April 30, 2009 (74 FR 13094, March 26, 2009).

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

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

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

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

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



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**2010-12-06 Bombardier, Inc.:** Amendment 39-16327. Docket No. FAA-2009-1223; Directorate Identifier 2009-NM-114-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective July 13, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to Bombardier, Inc. Model DHC-8-400, DHC-8-401, and DHC-8-402 series airplanes, certificated in any category, serial numbers 4105 through 4179 inclusive.

**Subject**

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

**Reason**

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

During final Acceptance Test Procedure (ATP), a small oil leak was discovered on the Spoiler Unload Valve and Rudder Shutoff Valve bodies. Investigation revealed that a number of valves were manufactured with an incorrect wall thickness. This thin wall condition caused cracking, subsequent external weeping and pressure loss from the subject valves.

This condition, if not corrected, will cause a loss of hydraulic fluid and subsequent loss of spoiler and/or rudder control.

Revision 1 of this directive mandates a new interval for the initial inspection, clarifies the time for replacement of the valve(s) specified in Paragraphs 1.2 and 2.2, and clarifies the labeling of the inspected valves in Paragraph 3 of this directive.

Required actions include doing detailed inspections of the left-hand and right-hand spoiler unload and rudder shutoff valve for leaking and weeping, replacing discrepant left-hand and right-hand spoiler

unload and rudder shutoff valves with new or serviceable valves, and eventually replacing all valves having a certain part number.

## **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) Do the actions specified in paragraphs (g)(1), (g)(2), and (g)(3) of this AD, as applicable.

(1) For airplanes having serial numbers 4105 through 4172 inclusive: Within 750 flight hours after the effective date of this AD, do a detailed inspection of the left-hand and right-hand spoiler unload valves having part number (P/N) 396000-1005 without suffix "A" after the serial number, for leaking and weeping, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-37, dated February 5, 2009. For airplanes with left-hand and right-hand spoiler unload valves having P/N 396000-1005 with suffix "A" after the serial number, no further action is required by this paragraph.

(i) If any leaking or weeping is found, prior to further flight, replace the affected spoiler unload valve with a new or serviceable valve, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-37, dated February 5, 2009.

(ii) If no leaking and no weeping are found, replace the valves with new or serviceable valves within 6,000 flight hours after the initial inspection required by paragraph (g)(1) of this AD, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-37, dated February 5, 2009.

(2) For airplanes having serial numbers 4113 through 4179 inclusive: Within 750 flight hours after the effective date of this AD, do a detailed inspection of the left-hand and right-hand rudder shutoff valves having P/N 412700-1001 without suffix "A" after the serial number, for leaking and weeping, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-39, dated February 5, 2009. For airplanes with left-hand and right-hand rudder shutoff valves having P/N 412700-1001 with suffix "A" after the serial number, no further action is required by this paragraph.

(i) If any leaking or weeping is found, prior to further flight, replace the affected rudder shutoff valve with a new or serviceable valve, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-39, dated February 5, 2009.

(ii) If no leaking and no weeping are found, replace the valves with new or serviceable valves within 6,000 flight hours after the initial inspection required by paragraph (g)(2) of this AD, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-27-39, dated February 5, 2009.

(3) As of the effective date of this AD, no person may install a spoiler unload valve assembly having P/N 396000-1005, having a serial number from 0289 through 0424 inclusive, or rudder shutoff valve having P/N 412700-1001, having a serial number from 0239 through 0384 inclusive, on any airplane, unless the valve has been inspected by the manufacturer and labeled with a suffix "A" after the serial number.

## **FAA AD Differences**

Note 1: 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-2009-25R1, dated July 23, 2009; Bombardier Service Bulletin 84-27-37, dated February 5, 2009; and Bombardier Service Bulletin 84-27-39, dated February 5, 2009; for related information.

## Material Incorporated by Reference

(j) You must use Bombardier Service Bulletin 84-27-37, dated February 5, 2009; or Bombardier Service Bulletin 84-27-39, dated February 5, 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 Bombardier, Inc., 400 Côte-Vertu Road West, Dorval, Québec H4S 1Y9, Canada; telephone 514-855-5000; fax 514-855-7401; e-mail [thd.qseries@aero.bombardier.com](mailto: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 NARA, call 202-741-6030, or go to: [http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

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

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



**2010-12-07 Empresa Brasileira de Aeronautica S.A. (EMBRAER):** Amendment 39-16328.  
Docket No. FAA-2010-0170; Directorate Identifier 2009-NM-127-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective July 22, 2010.

**Affected ADs**

(b) None.

**Applicability**

(c) This AD applies to all Empresa Brasileira de Aeronautica S.A. (EMBRAER) Model EMB-135ER, -135KE, -135KL, and -135LR airplanes; and EMBRAER Model EMB-145, -145ER, -145MR, -145LR, -145XR, -145MP, and -145EP airplanes; certificated in any category.

**Subject**

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

**Reason**

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

Reassessment of the damage tolerance analysis resulted in threshold reduction for some Structure Significant Items (SSI) of the Maintenance Review Board Report (MRBR) Airworthiness Limitations Items (ALI). Failure to inspect these structural components, according to the new threshold, could prevent a timely detection of fatigue cracking. These cracks, if not properly addressed, could adversely affect the structural integrity of the airplane.

\* \* \* \* \*

**Compliance**

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

**Actions**

(g) Within 90 days after the effective date of this AD, do the following actions, as applicable.

(1) For EMBRAER Model EMB-135ER, -135KE, -135KL, and -135LR airplanes, and Model EMB-145, -145EP, -145ER, -145LR, -145MP, and -145MR airplanes: Revise the Airworthiness

Limitations (ALS) of the Instructions for Continued Airworthiness (ICA) to incorporate Tasks 54-50-00-230-802-A00 and 54-50-00-220-808-A01 specified in Appendix 2, Airworthiness Limitation Requirements, of EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 12, dated September 19, 2008 (the "MRBR"). The initial compliance times for the tasks start from the applicable threshold specified in Appendix 2 of the MRBR, or within 500 flight cycles after the effective date of this AD, whichever occurs later.

(2) For EMBRAER Model EMB-145EP, -145ER, -145LR, -145MR, and -145MP airplanes: Revise the ALS of the ICA to incorporate Tasks 57-26-00-250-815-A00, 57-26-00-250-815-A01, 57-26-00-250-813-A00, and 57-26-00-250-813-A02, specified in Appendix 2, Airworthiness Limitation Requirements, of EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 12, dated September 19, 2008 ("the MRBR"). The initial compliance times for the tasks start from the later of the times specified in paragraph (g)(2)(i) or (g)(2)(ii) of this AD.

(i) At the later of the applicable thresholds specified in Appendix 2 of the MRBR or within 500 flight cycles after the effective date of this AD, whichever occurs later.

(ii) At the applicable time specified in Section A2.3.2.3.1, "Fatigue Threshold Reduced," of Appendix 2, Airworthiness Limitation Requirements, of the MRBR.

(3) For all airplanes: Revise the ALS of the ICA to incorporate Tasks 57-10-00-250-801-A00 and 57-10-00-250-801-A01 specified in EMBRAER Temporary Revision 12-1, dated November 27, 2008, to the EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 12, dated September 19, 2008. The initial compliance times for the tasks start at the times specified in paragraphs (g)(3)(i) and (g)(3)(ii) of this AD, as applicable.

(i) For Task 57-10-00-250-801-A00: Prior to the accumulation of 23,600 total flight cycles, or within 500 flight cycles after the effective date of this AD, whichever occurs later.

(ii) For Task 57-10-00-250-801-A01: Within 24,000 flight cycles after accomplishing EMBRAER Service Bulletin 145-57-0047, dated October 18, 2008, or within 500 flight cycles after the effective date of this AD, whichever occurs later.

(h) After accomplishing the actions specified in paragraph (g) of this AD, no alternative inspections, inspection intervals, or airworthiness limitations may be used unless the inspections, inspection intervals, or airworthiness limitations are approved as alternative method of compliance in accordance with the procedures specified in paragraph (i) of this AD.

## FAA AD Differences

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

## Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Todd Thompson, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1175; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your 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**

(j) Refer to MCAI Brazilian Airworthiness Directive 2009-05-02, effective June 1, 2009; EMBRAER Temporary Revision 12-1, dated November 27, 2008, to the EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 12, dated September 19, 2008; and Tasks 54-50-00-230-802-A00, 54-50-00-220-808-A01, 57-26-00-250-815-A00, 57-26-00-250-815-A01, 57-26-00-250-813-A00, and 57-26-00-250-813-A02, specified in Appendix 2, Airworthiness Limitation Requirements, of EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 12, dated September 19, 2008; for related information.

### **Material Incorporated by Reference**

(k) You must use EMBRAER Temporary Revision 12-1, dated November 27, 2008, to the EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150; and the specified tasks in Appendix 2, Airworthiness Limitation Requirements, of EMBRAER EMB135/EMB145 Maintenance Review Board Report MRB-145/1150, Revision 12, dated September 19, 2008; to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact 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](mailto: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](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

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

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



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**2010-12-08 Airbus:** Amendment 39-16329. Docket No. FAA-2010-0171; Directorate Identifier 2009-NM-185-AD.

**Effective Date**

- (a) This airworthiness directive (AD) becomes effective July 13, 2010.

**Affected ADs**

- (b) None.

**Applicability**

(c) This AD applies to all Airbus Model A300 B2-1A, B2-1C, B2K-3C, B2-203, B4-2C, B4-103, B4-203, B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, and F4-622R airplanes; Model C4-605R Variant F airplanes; and Model A310-203, -204, -221, -222, -304, -322, -324, and -325 airplanes; certificated in any category.

**Subject**

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

**Reason**

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

During a maintenance check performed by an A310 operator, the recommended modification of the lower attachment beam of rack 101VU by accomplishment of Airbus Service Bulletin (SB) A310-53-2076 was embodied on the aeroplane, leading the operator to find three cracks on the FR15A crossbeam above the NLG [nose landing gear] box at the splicing with rack 107VU fitting.

This condition, if not detected and corrected, could degrade the structural integrity of the crossbeam on NLG FR15A Web attachment fitting of rack 107VU. Rack 107VU contains major airworthiness system components whose functioning could be adversely affected by the loss of the attachment fitting.

As the A300 and A300-600 aeroplanes share this design feature, they are also affected.

For the reasons stated above, this AD requires repetitive inspections for cracks of the crossbeam on NLG FR15A Web face attachment fitting of rack 107VU and corrective action, depending on findings.

The corrective actions include contacting Airbus for repair instructions, and doing the repair if any crack is found.

## 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) Do the following actions.

(1) At the later of the times specified in paragraphs (g)(1)(i) and (g)(1)(ii) of this AD: Do a detailed inspection for cracks of the crossbeam on the nose landing gear FR15A Web attachment fitting of rack 107VU, in accordance with the Accomplishment Instructions in the applicable service bulletin specified in Table 1 of this AD.

(i) Before the accumulation of 6,600 total flight cycles.

(ii) Within 2,300 flight cycles or 30 months after the effective date of this AD, whichever occurs first.

(2) Thereafter, at intervals not to exceed 2,300 flight cycles, repeat the inspection specified in paragraph (g)(1) of this AD.

**Table 1 – Service bulletins**

<b>Model</b>	<b>Service Bulletin</b>	<b>Date</b>
Airbus Model A300 series airplanes	Airbus Mandatory Service Bulletin A300-53-0388, including Appendix 01	March 17, 2009
Airbus Model 300-600 series airplanes	Airbus Mandatory Service Bulletin A300-53-6164, including Appendix 01	March 17, 2009
Airbus Model A310 series airplanes	Airbus Mandatory Service Bulletin A310-53-2131, including Appendix 01	March 17, 2009

(3) If any crack is found during any inspection required by paragraphs (g)(1) and (g)(2) of this AD, before further flight contact Airbus for approved repair instructions and do the repair.

(4) Submit an inspection report of the inspection required by paragraph (g)(1) of this AD to Airbus Customer Services Directorate, 1 Rond Point Maurice Bellonte, 31707 Blagnac Cedex, France; telephone +33 5 61 93 33 33; fax +33 5 61 93 28 06; e-mail sb.reporting@airbus.com; at the applicable time specified in paragraph (g)(4)(i) or (g)(4)(ii) of this AD. The report must include the information specified on the inspection report sheet provided in Appendix 01 of the applicable service bulletin identified in Table 1 of this AD.

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

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

## FAA AD Differences

Note 1: 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, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to Attn: Dan Rodina, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-2125; fax (425) 227-1149. Before using any approved AMOC on any airplane to which the AMOC applies, notify your principal maintenance inspector (PMI) or principal avionics inspector (PAI), as appropriate, or lacking a principal inspector, your local Flight Standards District Office. The AMOC approval letter must specifically reference this AD.

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

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

## Related Information

(i) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0165, dated July 31, 2009, and the service information specified in Table 1 of this AD, for related information.

## Material Incorporated by Reference

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

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

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

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

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

**Table 2 – Material incorporated by reference**

<b>Document</b>	<b>Date</b>
Airbus Mandatory Service Bulletin A300-53-0388, including Appendix 01	March 17, 2009
Airbus Mandatory Service Bulletin A300-53-6164, including Appendix 01	March 17, 2009
Airbus Mandatory Service Bulletin A310-53-2131, including Appendix 01	March 17, 2009

Issued in Renton, Washington, on May 28, 2010.

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



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**2010-12-09 Honeywell International Inc. (formerly AlliedSignal Inc., formerly Garrett Auxiliary Power Division):** Amendment 39-16330. Docket No. FAA-2009-0803; Directorate Identifier 2009-NE-34-AD.

## Effective Date

(a) This airworthiness directive (AD) becomes effective July 22, 2010.

## Affected ADs

(b) None.

## Applicability

(c) This AD applies to Honeywell International Inc. Auxiliary Power Unit (APU) models GTCP36-150(R) and GTCP36-150(RR). These APUs are installed on, but not limited to, Fokker Services B.V. Model F.28 Mark 0100, and F.28 Mark 0070 airplanes.

## Unsafe Condition

(d) This AD results from eight reports of fuel leakage from the fuel control unit (FCU). We are issuing this AD to prevent fuel leakage in the APU compartment, which could lead to ignition of fuel vapor, creating a fire and explosion hazard resulting in injury, and damage to the APU and the airplane.

## Compliance

(e) You are responsible for having the actions required by this AD performed at the next shop visit of the APU, or the next shop visit of the APU FCU, or before the APU accumulates an additional 4,000 operating hours, whichever occurs first after the effective date of this AD, unless the actions have already been done.

## Inspection of the FCU Differential Pressure (Delta P) Sleeve Bore

(f) Inspect the FCU Delta P sleeve bore for erosion. Use paragraphs 3.B.(1) through 3.B.(4) of Honeywell International Inc. Service Bulletin (SB) No. 3882840-49-7975, Revision 1, dated April 10, 2009, to do the inspection:

(1) If the erosion in the Delta P sleeve bore is 0.030 inch or more in depth, replace the FCU housing.

(2) If the erosion in the Delta P sleeve bore is less than 0.030 inch in depth, the FCU housing is acceptable for use.

### **Installation of Fuel Deflector**

(g) Install fuel deflector, part number 70720001-1, onto the Delta P sleeve of the FCU. Use paragraphs 3.B(5) through 3.B.(9) of Honeywell International Inc. SB No. 3882840-49-7975, Revision 1, dated April 10, 2009, to do the installation.

### **Alternative Methods of Compliance**

(h) The Manager, Los Angeles 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**

(i) Contact Roger Pesuit, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; e-mail: roger.pesuit@faa.gov; telephone (562) 627-5251, fax (562) 627-5210, for more information about this AD.

### **Material Incorporated by Reference**

(j) You must use Honeywell International Inc. SB No. 3882840-49-7975, Revision 1, dated April 10, 2009, to perform the inspection and installation required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Honeywell International Inc., 111 S. 34th Street, Phoenix, Arizona 85034-2802; Web site: telephone No. (800) 601-3099; international telephone No. (601) 365-3099, for a copy of this service information. You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on May 28, 2010.

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



**2010-12-10 General Electric Company:** Amendment 39-16331. Docket No. FAA-2010-0068; Directorate Identifier 2010-NE-05-AD.

**Effective Date**

(a) This airworthiness directive (AD) becomes effective June 24, 2010.

**Affected ADs**

(b) This AD supersedes AD 2010-06-15, Amendment 39-16240.

**Applicability**

(c) 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, CF6-50C2-F, CF6-50C2-R, CF6-50E, CF6-50E1, and CF6-50E2 series turbofan engines, with any of the following low-pressure turbine (LPT) rotor stage 3 disks installed:

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

These engines are installed on, but not limited to, Boeing 747-200/-300, DC-10, MD-10, and KC-10 aircraft, and Airbus A300 series aircraft.

**Unsafe Condition**

(d) This AD results from reports received of two additional LPT rotor stage 3 disk events. 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.

## 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.

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

(f) Borescope-inspect the HPT rotor stage 1 and stage 2 blades from the forward and aft directions within 10 cycles from the effective date of this AD. You can find further guidance about borescoping in Table 2 of this AD.

(g) Thereafter, borescope-inspect the HPT rotor stage 1 and stage 2 blades from the forward and aft directions within every 75 cycles-since-last-inspection (CSLI). You can find further guidance about borescoping in Table 2 of this AD.

### Additional Borescope Inspections

(h) Borescope-inspect the HPT rotor stage 1 and stage 2 blades from the forward and aft directions within the cycle limits after the engine has experienced the events specified in Table 1 of this AD. You can find further guidance about borescoping in Table 2 of this AD.

**Table 1 – Additional Borescope Inspection Criteria**

<b>If The Engine Has Experienced:</b>	<b>Then Borescope Inspect:</b>
(1) An exhaust gas temperature (EGT) above redline.	Within 10 cycles.
(2) 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.
(3) A shift in the smoothed EGT trending data that exceeds 36° F (20° C).	Before further flight.
(4) A flightcrew reported vibration determined to be caused by the high-pressure rotor (N2).	Within 10 cycles from the report.

### Actions Required for Engines With Damaged HPT Rotor Blades

(i) Remove the engine before further flight if the engine fails the borescope inspection in paragraph (f), (g), or (h) of this AD.

(j) Before returning the engine to service, fluorescent penetrant inspect the inner diameter surface forward cone body (forward spacer arm) of the LPT rotor stage 3 disk. If a crack is found or if a circumferential band of fluorescence appears, permanently remove the disk from service.

### EGT System Checks

(k) Inspect the turbine midframe (TMF) liner for clocking and subsequent damage to the EGT probes, within 50 cycles from the effective date of this AD or before accumulating 750 CSLI of the TMF liner for clocking, whichever occurs later. You can find further guidance about TMF liner inspections in Table 2 of this AD.

(l) Thereafter, inspect the TMF liner for clocking and subsequent damage to the EGT probes within every 750 CSLI. You can find further guidance about TMF liner inspections in Table 2 of this AD.

(m) If the engine shows TMF liner clocking resulting in wear through 100% of the wall thickness of the thermocouple guide sleeve, remove the engine and repair the TMF and any damage to the EGT probes before further flight. You can find further guidance about TMF liner inspections in Table 2 of this AD.

(n) Check the resistance of the EGT system within 50 cycles from the effective date of this AD or before accumulating 750 cycles-since-the-last-resistance check of the EGT system, whichever occurs later. You can find further guidance about the EGT resistance check in Table 2 of this AD.

(o) Thereafter, check the resistance of the EGT system within every 750 CSLI. You can find further guidance about EGT resistance checks in Table 2 of this AD.

(p) Repair or replace any EGT system component that fails this check, before further flight. You can find further guidance about the EGT resistance check in Table 2 of this AD.

## Definitions

(q) 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. You can find further guidance about troubleshooting EGT above redline in Table 2 of this AD.

(r) For the purposes of this AD, a shift in the smoothed EGT trending data is a shift in a rolling average of EGT that can be confirmed by a corresponding shift in the trending of fuel flow or fan speed/core speed relationship. You can find further guidance about evaluating EGT trend data in GE Company Service Rep Tip 373 "Guidelines For Parameter Trend Monitoring."

**Table 2 - AMM References For Further Guidance**

<b>Engine Inspections</b>	<b>Boeing 747/CF6-50/-45 AMM ATA</b>	<b>Boeing DC-10/CF6-50 AMM ATA</b>	<b>Boeing MD-10/ CF6-50 AMM ATA</b>	<b>Airbus A300/CF6-50 AMM ATA</b>
Borescope Inspection of HPT Rotor Stage 1 and Stage 2 Blades	72-00-00, 601	72-53-00	72-53-00	72-53-00
Exceeded EGT Limit	72-00-00, 601	72-00-00, 601	72-00-00,6-1	72-00-00, 601
EGT Resistance Check	77-21-00, 501	77-21-00	77-21-01	77-21-00
TMF Liner Clocking	72-00-00, 601, and 72-52-00	72-54-00	72-54-00 and 77-21-01	72-54-00

### **Previous Credit**

(s) A borescope inspection performed before the effective date of this AD using AD 2010-06-15 and within the last 75 cycles, satisfies the initial borescope inspection requirement in paragraph (f) of this AD.

### **Alternative Methods of Compliance**

(t) Alternative methods of compliance previously approved for AD 2010-06-15, are not approved for this AD.

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

### **Related Information**

(v) Contact Christopher J. Richards, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: christopher.j.richards@faa.gov; phone: (781) 238-7133; fax: (781) 238-7199, for more information about this AD.

### **Material Incorporated by Reference**

(w) None.

Issued in Burlington, Massachusetts, on June 4, 2010.  
Peter A. White,  
Assistant Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.