



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
LARGE AIRCRAFT**

BIWEEKLY 2011-18

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Regulatory Support Division
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LARGE AIRCRAFT

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; FR - Final Rule of Emergency			
Biweekly 2011-01			
2010-25-06		Boeing	737-200, -300, -400, and -500 series
2010-26-05		Dassault Aviation	Falcon 10, Fan Jet Falcon, Fan Jet Falcon Series C, D, E, F, and G, Mystere-Falcon 20-C5, 20-D5, 20-E5, 20-F5, Mystere-Falcon 200, Mystere-Falcon 50, Mystere-Falcon 900, Falcon 900EX, Falcon 2000 and Falcon 2000EX
2010-26-06		Boeing	737-600, -700, -700C, -800, and -900 series
2010-26-07		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 series
2010-26-08		Boeing	767-200, -300, -300F, and -400ER series
2010-26-10	S 2006-05-09	Boeing	747-200C, -200F, -400, -400D, and -400F series
2010-26-12		Airbus	A321-211, -212, -231, and -232
2010-26-13		Bombardier	DHC-8-301, -311, and -315
Biweekly 2011-02			
2010-02-05		Airbus	See AD
2010-24-05	COR	Pratt & Whitney Canada	Engine: PW305A and PW305B
2010-24-06	S 2006-12-18	Short Brothers PLC	SD3-60 SHERPA, SD3-SHERPA, SD3-30, and SD3-60
2011-01-01	S 2008-13-15	Embraer	EMB-135BJ
2011-01-02		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, 343, A340-211, -212, -213, -311, -312, and -313
2011-01-05		Boeing	727, 727C, 727-100, 727-100C, 727-200, and 727-200F
2011-01-06	S 2007-02-22	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-01-07		328 Support Services GmbH	328-100 and -300
2011-01-09		B/E Aerospace	Appliance: Protective breathing equipment (PBE) units
2011-01-10		Bombardier	BD-700-1A10 and BD-700-1A11
2011-01-11		Boeing	MD-90-30
2011-01-12	S 2008-21-03	Boeing	737-300, -400, and -500 series
2011-01-13		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F
2011-01-15		Boeing	757-200, -200CB, and -300 series
2011-01-16		Boeing	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88
2011-02-01		Boeing	MD-11 and MD-11F
2011-02-03		Boeing	757-200, -200PF, -200CB, and -300 series
Biweekly 2011-03			
2011-02-05		Boeing	727, 727C, 727-100, 727-100C, 727-200, and 727-200F series
2011-02-06		Boeing	767-300 series
2011-02-09		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313
2011-03-01	S 2005-25-05	Pratt & Whitney	JT8D-7, -7A, -7B, -9, -9A, -11, -15, -15A, -17, -17A, -17R, and -17AR series

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Biweekly 2011-04			
2011-02-07	S 2010-12-10	General Electric	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, CF6-50E2, CF6-50C2-F and CF6-50C2-R
2011-03-07		Fokker Services	F.28 Mark 1000, 2000, 3000, 4000, and F.28 Mark 0100
2011-03-08		Bombardier	CL-215-1A10 (CL-215), CL-215-6B11 (CL-215T Variant), and CL-215-6B11 (CL-415 Variant)
2011-03-09		Boeing	MD-90-30
2011-03-10	S 2005-20-32	Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313
2011-03-11		Airbus	A300 B4-601, B4-603, B4-620, B4-622, A300 B4-605R, B4-622R, A300 F4-605R, and A300 C4-605R Variant F
2011-03-12		Hawker Beechcraft	400A and 400T
2011-03-13		Bombardier	CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2011-03-14		Boeing	737-100, -200, -200C, -300, -400, -500 series, and 737-400 series
2011-04-02		Hamilton Sundstrand	Propeller: 247F series
Biweekly 2011-05			
2011-03-15		Boeing	767-200, -300, -300F, and -400ER series
2011-03-16		Cessna	750
2011-04-01		Fokker	F.28 Mark 0070 and 0100
2011-04-03		Bombardier	CL-600-2B19 (Regional Jet Series 100 and 440)
2011-04-04	S 2005-18-02	Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219 turbofan
2011-04-05		Airbus	A340-211, -212, -213; A340-311, -312, -313; A340-541; and A340-642
2011-04-06		Airbus	A340-211, -212, -213; A340-311, -312, -313; A340-541; A340-642
2011-04-07		Fokker	F.28 Mark 0070 and 0100
2011-04-08		Learjet	45
2011-04-10	S 2009-23-10	Boeing	737-300, -400, and -500 series
2011-05-03	S 2005-06-04	Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2011-05-04	S 2008-23-19	Boeing	757-200, -200CB, -200PF, and -300 series
2011-05-05		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, -313, -541, and -642
Biweekly 2011-06			
98-09-27R1		Rolls-Royce plc	Engine: RB211-Trent 768, 772, and 772B turbofan
2011-04-09		Transport Category Airplanes	Transport Category Airplanes
2011-05-10		BAE Systems (Operations) Limited	ATP, HS 748 2A and series 2B
2011-05-11	S 2007-19-19	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series
2011-05-12		Boeing	777-200, -200LR, -300, and -300ER series
2011-05-13		Saab AB, Saab Aerosystems	SAAB 2000
2011-05-14		Bombardier	DHC-8-400, -401, and -402
2011-06-04		Airbus	A330-243F

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Biweekly 2011-07			
2011-06-03		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 series
2011-06-05 2011-06-08	S 2007-18-52	Boeing Bombardier	737-600, -700, -700C, -800, -900, and -900ER series CL-600-2B19 (Regional Jet Series 100 & 440), CL-600-2C10 (Regional Jet Series 700, 701, & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2011-06-09	S 2009-11-09	Airbus	A300 B4-601, A300 B4-603, A300 B4-620, A300 B4-622, A300 B4-605R, A300 B4-622R; A300 F4-605R, A300 F4-622R; and A300 C4-605R Variant F, A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-06-11		Rolls-Royce plc	Engine: RB211-Trent 970-84, 970B-84, 972-84, 972B-84, 977-84, 977B-84, and 980-84 turbofan
2011-06-12 2011-07-01	S 2009-04-17	Boeing General Electric	MD-90-30 Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, CF6-50E2, and CF6-50E2B
2011-07-02	S 2005-02-03	Pratt & Whitney	Engine: JT8D-209, -217, -217A, -217C, and -219 series turbofan
Biweekly 2011-08			
2011-07-04		Boeing	DC-9-14, DC-9-15, DC-9-15F, DC-9-21, DC-9-31, DC-9-32, DC-9-32 (VC-9C), DC-9-32F, DC-9-32F (C-9A), DC-9-32F (C9-B), DC-9-33F, DC-9-34, DC-9-34F, DC-9-41, and DC-9-51
2011-07-05 2011-07-06 2011-07-07 2011-07-08 2011-07-10 2011-07-11 2011-08-51	S 2010-10-18 E	Sigma Aero Seat Bombardier, Inc Fokker Services B.V. Airbus Bombardier, Inc. Dassault Aviation Boeing	Appliance: See AD CL-600-2B19 (Regional Jet Series 100 & 440) F.28 Mark 1000, 2000, 3000, and 4000 A340-211, -212, -213, -311, -312 and -313 BD-100-1A10 (Challenger 300) Mystere-Falcon 50 737-300, -400, and -500 series
Biweekly 2011-09			
2011-07-12 2011-08-02 2011-08-03 2011-08-04		Fokker Services B.V. Fokker Services B.V. Airbus Bombardier, Inc	F.27 Mark 050 F.27 Mark 050 A340-541 and -642 CL-600-2C10 (Regional Jet Series 700, 701 & 702), CL-600-2D15 (Regional Jet Series 705) and CL-600-2D24 (Regional Jet Series 900)
2011-08-05		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, A300 C4-605R Variant F, A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-08-08		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, ERJ 170-200 LR, -200 SU, -200 STD, ERJ 190-100 STD, -100 LR, -100 ECJ, -100 IGW, ERJ 190-200 STD, -200 LR, and -200 IGW
2011-08-10 2011-08-11	S 98-19-12 S 2005-13-19	Rolls-Royce plc BAE Systems (Operations) Limited	Engine: RB211-Trent 768-60 and RB211-Trent 772-60 turbofan BAe 146-100A, -200A, -300A, Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2011-08-12		Airbus	A330-301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, A340-311, -312, and -313
2011-09-01 2011-09-02 2011-09-03 2011-09-05 2011-09-06	S 2002-02-07	Airbus Saab AB, Saab Aerosystems Lockheed Martin Corp Boeing Airbus	A340-541, and -642 340A (SAAB/SF340A) and SAAB 340B 382, 382B, 382E, 382F, and 382G 777-200, -300, and -300ER series A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-211, -212, -213, -311, -312, and -313

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Biweekly 2011-10

2011-08-07		Rolls-Royce plc	Engine: RB211-Trent 875-17, RB211-Trent 877-17, RB211-Trent 884-17, RB211-Trent 884B-17, RB211-Trent 892-17, RB211-Trent 892B-17, and RB211-Trent 895-17 turbofan
2011-09-07		Rolls-Royce plc	Engine: RB211-524G2-T-19, -524G3-T-19, -524H-T-36, -524H2-T-19; RB211 Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, 560A2-61; RB211 Trent 768-60, 772-60, 772B-60; RB211 Trent 875-17, 877-17, 884-17, 884B-17, 892-17, 892B-17, and 895-17 turbofan
2011-09-10		Airbus	A300 B4-601, B4-603, B4-605R, C4-605R Variant F, and F4-605R airplanes, and A310-204 and -304
2011-09-11		Boeing	777-200 and -300 series
2011-09-12		Bombardier, Inc.	DHC-8-101, -102, -103, -106, -201, -202, -301, -311, -315, DHC-8-401, and -402
2011-09-13		Airbus	A340-211, -212, -213, -311, -312, and -313
2011-09-14		Boeing	747-200B, -300, -400, -400D, and -400F series
2011-09-15		Boeing	777-200, -200LR, -300, and -300ER series
2011-09-17	S 2010-01-07	Airbus	A340-211, -212, -213, -311, -312, -313, -541, and -642
2011-09-18		Dassault Aviation	FALCON 7X
2011-10-01		Dassault Aviation	FALCON 7X
2011-10-04		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 turbofan

Biweekly 2011-11

2011-08-51		Boeing	737-300, -400, and -500 series
2011-09-04		Lockheed Martin Corporation	382, 382B, 382E, 382F, and 382G
2011-10-02		Boeing	747-400, 747-400D, and 747-400F series
2011-10-03		Embraer	ERJ 170-100 LR, -100 STD, -100 SE, -100 SU, ERJ 170-200 LR, -200 SU, -200 STD, ERJ 190-100 STD, ERJ 190-100 LR, ERJ 190-100 IGW, ERJ 190-200 STD, ERJ 190-200 LR, and ERJ 190-200 IGW
2011-10-05		Airbus	A310-203, -204, -222, -304, -322, and -324
2011-10-06		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-10-07		Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-10-08	S 98-26-01 S 91-13-01	Airbus	A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-10-10		Airbus	A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, and C4-605R Variant F
2011-10-14	S2010-24-08	Dassault Aviation	MYSTERE-FALCON 50
2011-10-15		Airbus	A318-112, A319-111, A319-112, A319-115, A319-132, A319-133, A320-214, A320-232, A320-233, A321-211, A321-213, and A321-231
2011-10-17	S 2007-04-11 S 2007-20-03 S 2007-25-02	Airbus	A300 B2-1A, B2-1C, B4-2C, B2K-3C, B4-103, B2-203, B4-203, A310-203, -204, -221, -222, -304, -322, -324, 325, A300 B4-601, B4-603, B4-620, B4-622, B4-605R, B4-622R, F4-605R, F4-622R, A300 C4-605R Variant F
2011-11-02		Bombardier, Inc.	DHC-8-400, -401, and -402

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Biweekly 2011-12			
2010-24-13	COR	Boeing	747-100, 747-100B, 747-100B SUD, 747-200B, 747-200C, 747-200F, 747-300, 747SR, and 747SP series
2011-07-06	COR	Bombardier, Inc.	CL-600-2B19 (Regional Jet Series 100 & 440)
2011-11-05	S 2007-15-05	Boeing	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
2011-11-06	S 2002-03-10	BAE Systems (Operations) Limited	BAe 146-100A, -200A, -300A, Avro 146-RJ70A, 146-RJ85A, and 146-RJ100A
2011-11-08		Rolls-Royce plc	Engine: RB211-535E4-37, -535E4-B-37, -535E4-B-75, and -535E4-C-37 turbofan
2011-12-01		Koito Industries, Ltd.	Appliance: Seats and seating systems
2011-12-51	E	Dassault Aviation	FALCON 7X
Biweekly 2011-13			
2009-18-19 R1		Airbus	A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, -343 series, A340-211, -212, -213, -311, -312, and -313 series
2011-12-05		Boeing	727, 727C, 727-100, 727-100C, 727-200, and 727-200F series
2011-12-06		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)
2011-12-09		Boeing	737-100, -200, -200C, -300, -400, and -500 series
2011-12-11	S 2001-14-19	Boeing	767-200, -300, -300F series, 767-400ER series
2011-12-12		Boeing	MD-90-30
2011-12-13		Boeing	737-600, -700, -700C, -800, -900, and -900ER series
2011-12-14		Fokker Services B.V.	F.28 Mark 0070 and 0100
Biweekly 2011-14			
2011-08-09		Embraer	EMB-120, -120ER, -120FC, -120QC, and -120RT
2011-12-51		Dassault Aviation	FALCON 7X
2011-13-04		Rolls-Royce plc	Engine: RB211-Trent 553-61, 553A2-61, 556-61, 556A2-61, 556B-61, 556B2-61, 560-61, and 560A2-61 turbofan
2011-13-06		Bombardier, Inc.	DHC-8-400, -401, and -402
2011-13-07	S 2010-02-02	Dassault Aviation	FALCON 7X
2011-13-08		Bombardier, Inc.	DHC-8-400, -401, and -402
2011-13-09	S 2007-05-08	Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343
2011-13-10	S 2009-11-13	Learjet Inc	45
2011-13-11	S 2007-06-18	Airbus	A318-111, -112, -121, -122, A319-111, -112, -113, -114, -115, -131, -132, -133, A320-111, -211, -212, -214, -231, -232, -233; A321-111, -112, -131, -211, -212, -213, -231, and -232

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Biweekly 2011-15

2011-09-09		Bombardier, Inc.	CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A and CL-601-3R Variants), and CL-600-2B16 (CL-604 Variants)
2011-12-13	COR	Boeing	737-600, -700, -700C, -800, -900, and -900ER series
2011-13-01		Rolls-Royce plc	Engine: RB211-524D4-19, -524D4-B-19, -524D4-39, -524D4-B-39, -524D4X-19, -524D4X-B-19, -524H-36, -524H2-19, -524H-T-36, -524H2-T-19, -524G2-19, -524G3-19, -524G2-T-19, and -524G3-T-19
2011-14-01		Airbus	A300 B4-601, B4-603, B4-620, B4-622; A300 B4-605R, B4-622R; A300 F4-605R, F4-622R; A300 C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-14-03		Boeing	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87) and MD-88
2011-14-04		Dassault Aviation	FALCON 7X
2011-14-08		B/E Aerospace	Appliance: Continuous Flow Passenger Oxygen Mask Assembly
2011-14-10		Airbus	A330-342
2011-14-11		Boeing	747-400 and -400D series
2011-14-12		Saab AB, Saab Aerosystems	SAAB 2000
2011-15-01		Boeing	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88
2011-15-02	S 2008-20-01	Lockheed Martin	382, 382B, 382E, 382F, and 382G
2011-15-03	S 97-26-07	Boeing	747-100, -100B, -100B SUD, -200B, -200C, -200F, -300, -400, -400D, -400F, 747SR, and 747SP series
2011-15-06		General Electric	Engine: GE90-76B; GE90-77B; GE90-85B; GE90-90B; and GE90-94B turbofan

Biweekly 2011-16

2011-14-06	S 2007-20-05	Airbus	A318-111, -112, -121, -122, A319-111, -112, -113, -114, -115, -131, -132, -133, A320-111, -211, -212, -214, -231, -232, -233, A321-111, -112, -131, -211, -212, -213, -231, and -232
2011-15-07		328 Support Services GmbH	328-100 and -300
2011-15-08		Airbus	A300 B4-601, B4-603, B4-620, B4-622, A300 B4-605R, B4-622R, A300 F4-605R, F4-622R, A300 C4-605R Variant F; A310-203, -204, -221, -222, -304, -322, -324, and -325
2011-15-09	S 2011-05-14	Bombardier, Inc.	DHC-8-400, -401, and -402
2011-16-02		Boeing	747 and 767

Biweekly 2011-17

2011-09-09	Cor	Bombardier, Inc.	CL-600-2A12 (CL-601), CL-600-2B16 (CL-601-3A and CL-601-3R Variants), CL-600-2B16 (CL-604 Variants), and CL-600-2B16 (CL-604 Variants)
2011-14-07		Pratt & Whitney	Engine: PW4074 and PW4077 turbofan
2011-16-01	S 2011-12-51	Dassault Aviation	FALCON 7X
2011-16-03		Airbus	See AD
2011-16-06		Boeing	747-400 and -400F series
2011-17-02		Airbus	A320-214, -232, and -233
2011-17-03		Fokker Services B.V.	F.28 Mark 1000, 2000, 3000, and 4000
2011-17-10		Fokker Services B.V.	F.28 Mark 1000, 2000, 3000, and 4000

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

Biweekly 2011-18

2011-17-04		Bombardier	DHC-8-400, -401, and -402
2011-17-07		M7 Aerospace LP	SA226-T, SA226-T(B), SA226-TC, SA226-AT
	S 2006-09-07	Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, A330-301, -302, -303, -321, -322, -323, -341, -342, and -343
2011-17-09		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, A330-301, -302, -303, -321, -322, -323, -341, -342, and -343
2011-17-11		Boeing	DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88
2011-17-12		Bombardier	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)
2011-17-16		Airbus	A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, A340-311, -312, -313, A340-541 and -642
2011-18-01		General Electric	Engine: CF6-45A, CF6-45A2, CF6-50A, CF6-50C, CF6-50CA, CF6-50C1, CF6-50C2, CF6-50C2B, CF6-50C2D, CF6-50E, CF6-50E1, and CF6-50E2 series turbofan
2011-18-02		General Electric	Engine: CF34-10E2A1; CF34-10E5; CF34-10E5A1; CF34-10E6; CF34-10E6A1; CF34-10E7; and CF34-10E7-B turbofan
2011-18-03		Boeing	737-600, -700, -700C, -800, -900 series, 737-600, -700, -700C, -800, and -900 series
2011-18-05		Saab Ab, Saab Aerosystems	SAAB 2000
2011-18-08		Bombardier	CL-600-2B19 (Regional Jet Series 100 & 440)
2011-18-51	E	Honeywell International, Inc.	Engine: TPE331



2011-17-04 Bombardier, Inc.: Amendment 39-16768. Docket No. FAA-2011-0470; Directorate Identifier 2010-NM-190-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 19, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model DHC-8-400, -401, and -402 airplanes, certificated in any category, having serial numbers 4001 through 4247 inclusive.

Subject

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

Reason

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

One in-service incident has been reported on [a] DHC-8 Series 400 aeroplane in which the right hand main landing gear (MLG) failed to extend using the alternate gear extension system. * * * Failure of [the] MLG to extend and lock could adversely affect the safe landing of the aeroplane.

* * * * *

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 2,000 flight hours after the effective date of this AD: Incorporate Bombardier Modsum 4-113645, including performing a detailed visual inspection for damage or cracks of the bumper plate and base fitting and replacing any damaged or cracked part, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 84-32-74, Revision A, dated May 17, 2010. Do all applicable replacements before further flight.

(h) For airplanes on which a bumper plate having part number 85424082-101 or 85424082-103 is installed that has been reworked in accordance with Bombardier Repair Drawing 8/4-54-553: Within 1,000 flight hours after the effective date of this AD, reidentify the bumper plate, in

accordance with paragraph 3.B., step (8) of the Accomplishment Instructions of Bombardier Service Bulletin 84-32-74, Revision A, dated May 17, 2010.

Note 1: Bombardier Service Bulletin 84-32-74, Revision A, dated May 17, 2010, includes an operational check of the alternate extension system of the MLG. If the check fails, guidance on doing corrective actions can be found in the Bombardier Q400 Dash 8 Aircraft Maintenance Manual.

Credit for Actions Accomplished in Accordance With Previous Service Information

(i) Incorporation of Bombardier Modsum 4-113645 before the effective date of this AD in accordance with Bombardier Service Bulletin 84-32-74, dated December 23, 2009, is considered acceptable for compliance with the modification in paragraph (h) of this AD, provided the action in paragraph (h) of this AD is done within the compliance time specified in paragraph (h) of this AD.

FAA AD Differences

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

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the New York ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York, 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC 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.

Related Information

(k) Refer to MCAI Canadian Airworthiness Directive CF-2010-23, dated July 21, 2010; and Bombardier Service Bulletin 84-32-74, Revision A, dated May 17, 2010; for related information.

Material Incorporated by Reference

(l) You must use Bombardier Service Bulletin 84-32-74, Revision A, dated May 17, 2010, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Bombardier, Inc., Q-Series Technical Help Desk, 123 Garratt Boulevard, Toronto, Ontario M3K 1Y5, Canada; telephone 416-375-4000; fax 416-375-4539; e-mail 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.

Issued in Renton, Washington, on July 29, 2011.

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



2011-17-07 M7 Aerospace LP: Amendment 39-16771; Docket No. FAA-2011-0832; Directorate Identifier 2011-CE-025-AD.

(a) Effective Date

This AD is effective September 1, 2011.

(b) Affected ADs

AD 87-02-02 (52 FR 2511, January 23, 1987) requires repetitive inspection or replacement of all flight control cables on Models SA226 and SA227 airplanes. This new action requires repetitive replacement of specific flight control cables on affected serial number Model SA226 airplanes that have been modified by installation of a camera system requiring rerouting of the affected flight control cables.

(c) Applicability

This AD applies to the following M7 Aerospace LP airplanes, certificated in any category, as identified in Table 1 of this AD:

Table 1—Applicability

Model —	Serial Numbers —
SA226-T	T265, T267
SA226-T(B)	T(B)348
SA226-TC	TC277
SA226-AT	AT071, AT072, AT073

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code: 27, Flight Controls.

(e) Unsafe Condition

This AD was prompted by a report of a failure of a rudder control cable. We are issuing this AD to correct the unsafe condition on these products.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done, following M7 Aerospace LP Service Bulletin 226-27-072, dated June 27, 2011. If the hours time-in-service (TIS) of

the control cables can not be positively determined by the logbook, then you must use hours TIS of the airplane to comply with the requirements of this AD.

(g) Inspection

(1) For cables with more than 6,000 hours TIS: Inspect cables for deficiencies within 10 hours TIS after September 1, 2011 (the effective date of this AD).

(2) If any deficiencies are found during the inspection required in paragraph (g)(1) of this AD, before further flight replace cables.

(h) Replacement

(1) Replace primary control cables within the initial compliance times as listed below and repetitively thereafter at intervals not to exceed 3,500 hours time-in-service (TIS):

(i) For cables with less than or equal to 3,500 hours TIS: Replace cables when the control cables reach a total of 3,500 hours TIS or 150 hours TIS after September 1, 2011 (the effective date of this AD), whichever occurs later.

(ii) For cables with less than or equal to 5,000 hours TIS but greater than 3,500 hours TIS: Replace cables within 150 hours TIS after September 1, 2011 (the effective date of this AD).

(iii) For cables with more than 5,000 hours TIS: Replace cables within 50 hours TIS after September 1, 2011 (the effective date of this AD).

(2) Between 50 hours TIS and 200 hours TIS after installing any new control cable as required in paragraphs (g)(2) or (h)(1) of this AD, check (set) flight control cable tension.

(i) Alternative Methods of Compliance (AMOCs)

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

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

(j) Related Information

For more information about this AD, contact Andrew McAnaul, Aerospace Engineer, FAA, ASW-150 (c/o San Antonio MIDO (SW-MIDO-43)), 10100 Reunion Place, Suite 650, San Antonio, Texas 78216; phone: (210) 308-3365; fax: (210) 308-3370; e-mail: andrew.mcanaul@faa.gov.

(k) Material Incorporated by Reference

You must use the following service information to do the actions required by this AD, unless the AD specifies otherwise.

(1) The Director of the Federal Register approved the incorporation by reference (IBR) under 5 U.S.C. 552(a) and 1 CFR part 51 of M7 Aerospace LP Service Bulletin 226-27-072, dated June 27, 2011, on September 1, 2011.

(2) For service information identified in this AD, contact M7 Aerospace, LC, 10823 NE. Entrance Road, San Antonio, Texas 78216; telephone (210) 824-9421; fax: 800-347-5901; e-mail: http://www.m7aerospace.com/page/1/contact_parts.jsp; Web site: <http://www.m7aerospace.com>.

(3) You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call 816-329-4148.

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on August 2, 2011.

John R. Colomy,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



2011-17-08 Airbus: Amendment 39-16772. Docket No. FAA-2011-0224; Directorate Identifier 2010-NM-210-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 30, 2011.

Affected ADs

(b) This AD supersedes AD 2006-09-07, Amendment 39-14577 (71 FR 25919, May 3, 2006).

Applicability

(c) This AD applies to Airbus Model A330-201, -202, -203, -223, -223F, -243, and -243F airplanes, and Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes; certificated in any category; all manufacturer serial numbers.

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

Subject

(d) Air Transport Association (ATA) of America Code 05.

Reason

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

* * * * *

The airworthiness limitations applicable to Damage Tolerant Airworthiness Limitation Items (DT ALI) are currently given in Airbus A330 ALI Document reference AI/SE-M4/95A.0089/97, which is approved by the European Aviation Safety Agency (EASA) and referenced in Airbus Airworthiness Limitations Section (ALS) Part 2.

The issue 17 of Airbus A330 ALI Document introduces more restrictive maintenance requirements/airworthiness limitations. Failure to comply with this issue constitutes an unsafe condition.

This [EASA] AD supersedes EASA AD 2009-0102 [and retains the requirements therein], and requires the implementation of the new or more restrictive maintenance

requirements/airworthiness limitations as specified in Airbus A330 ALI Document issue 17.

The unsafe condition is fatigue cracking, damage, and corrosion in certain structure, which could result in reduced 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.

Restatement of Requirements of Paragraph (f)(2) of AD 2006-09-07, Amendment 39-14577 (71 FR 25919, May 3, 2006)

Airworthiness Limitations Revision

(g) For Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes: Within 3 months after June 7, 2006 (the effective date of AD 2006-09-07, Amendment 39-14577 (71 FR 25919, May 3, 2006)), revise the ALS of the Instructions for Continued Airworthiness by incorporating Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 12, dated November 1, 2003, as specified in Section 9-2 of the Airbus A330 Maintenance Planning Document (MPD), into the ALS.

New Requirements of This AD

Revise the Maintenance Program

(h) Within 3 months after the effective date of this AD: Revise the maintenance program by incorporating Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010. At the times specified in Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010, comply with all applicable maintenance requirements and associated airworthiness limitations included in Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010. Accomplishing the revision in this paragraph ends the requirements in paragraph (g) of this AD.

Alternative Intervals or Limits

(i) Except as provided by paragraph (j)(1) of this AD, after accomplishing the actions specified in paragraph (h) of this AD, no alternatives to the maintenance tasks, intervals, or limitations specified in paragraph (h) of this AD may be used.

FAA AD Differences

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

Other FAA AD Provisions

(j) 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. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the

International Branch, send it to ATTN: 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. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

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

Related Information

(k) Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2010-0174, dated August 17, 2010; Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 12, dated November 1, 2003; and Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010; for related information.

Material Incorporated by Reference

(l) You must use Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010; and Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 12, dated November 1, 2003; as applicable; to do the actions required by this AD; unless the AD specifies otherwise. The issue number of Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010, is indicated only on the title page of this document.

(1) The Director of the Federal Register approved the incorporation by reference of Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 17, dated May 28, 2010, 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 Airbus Document AI/SE-M4/95A.0089/97, "A330 Airworthiness Limitation Items," Issue 12, dated November 1, 2003, on June 7, 2006 (71 FR 25919, May 3, 2006).

(3) 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>.

(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 August 2, 2011.

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



2011-17-09 Airbus: Amendment 39-16773. Docket No. FAA-2011-0225; Directorate Identifier 2010-NM-211-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 30, 2011.

Affected ADs

(b) AD 2011-17-08, Amendment 39-16772, also published in today's Federal Register, is affected by this AD. AD 2011-17-08 supersedes AD 2006-09-07, Amendment 39-14577 (71 FR 25919, May 3, 2006). The requirements of paragraph (f)(2) of AD 2006-09-07 (paragraph (g) of AD 2011-17-08) for Airbus Model A330 airplanes are restated in this AD.

Applicability

(c) This AD applies to Airbus Model A330-201, -202, -203, -223, -223F, -243, and -243F airplanes, and Model A330-301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, certificated in any category, all manufacturer serial numbers.

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

Subject

(d) Air Transport Association (ATA) of America Code 05.

Reason

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

* * * * *

The airworthiness limitations applicable to the Safe Life Airworthiness Limitation Items (SL ALI) are given in Airbus A330 ALS Part 1 and A340 ALS Part 1, which are approved by the European Aviation Safety Agency (EASA).

The revision 05 of Airbus A340 ALS Part 1 introduces more restrictive maintenance requirements and/or airworthiness limitations. Failure to comply with this revision constitutes an unsafe condition.

For A330 aeroplanes, this EASA AD retains the requirements of EASA AD 2010-0131, which it supersedes.

For A340 aeroplanes, this EASA AD supersedes EASA AD 2009-0192, and requires the implementation of the new or more restrictive maintenance requirements and/or airworthiness limitations as specified in Airbus A340 ALS Part 1, revision 05.

The unsafe condition is fatigue cracking, damage, and corrosion in certain structure, which could result in reduced 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.

Restatement of Requirements of Paragraph (f)(2) of AD 2006-09-07: Airworthiness Limitations Revision

(g) For Model A330-201, -202, -203, -223, -243, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes: Within 3 months after June 7, 2006 (the effective date of AD 2006-09-07 (71 FR 25919, May 3, 2006)), revise the ALS of the Instructions for Continued Airworthiness by incorporating Section 9-1 "Life limit/Monitored parts," Revision 05, dated April 7, 2005, of the Airbus A330 Maintenance Planning Document, into the ALS.

New Requirements of This AD

Revise the Maintenance Program

(h) Within 3 months after the effective date of this AD: Revise the maintenance program by incorporating Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010. Comply with all Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010, at the times specified therein. Accomplishing the revision in this paragraph ends the requirements in paragraph (g) of this AD.

Alternative Intervals or Limits

(i) Except as provided by paragraph (j)(1) of this AD, after accomplishing the actions specified in paragraph (h) of this AD, no alternatives to the maintenance tasks, intervals, or limitations specified in paragraph (h) of this AD may be used.

FAA AD Differences

Note 2: This AD differs from the MCAI and/or service information as follows:

(1) Although the applicability in the MCAI also identifies Airbus Model A340-200, -300, -500, and -600 series airplanes, this AD only applies to Airbus Model A330-200 and -300 series airplanes. FAA AD 2011-04-06, Amendment 39-16606 (76 FR 8610, February 15, 2011), addresses Model A340-200, -300, -500, and -600 series airplanes.

(2) The applicability in the MCAI does not specify Model A330-223F and -243F airplanes. Those models are listed in the applicability of this AD.

(3) The MCAI requires incorporating Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 04, dated January 28, 2010; however, this AD requires incorporating

Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010, which adds the airworthiness limitation items for Model A330-223F and -243F airplanes.

Other FAA AD Provisions

(j) 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. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: 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. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

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

Related Information

(k) Refer to MCAI EASA Airworthiness Directive 2010-0253, dated December 3, 2010; Section 9-1 "Life limit/Monitored parts" Revision 05, dated April 7, 2005, of the Airbus A330 Maintenance Planning Document; and Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010; for related information.

Material Incorporated by Reference

(l) You must use Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010; and Airbus A330 ALS Section 9-1 "Life limit/Monitored parts" Revision 05, dated April 7, 2005, of the Airbus A330 Maintenance Planning Document; as applicable; to do the actions required by this AD, unless the AD specifies otherwise. The revision level of Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010, is indicated only on the title page and in the Record of Revisions of this document; the revision date of this document is not indicated on the title page of this document.

(1) The Director of the Federal Register approved the incorporation by reference of Airbus A330 ALS Part 1, "Safe Life Airworthiness Limitation Items," Revision 05, dated July 29, 2010, 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 Section 9-1 "Life limit/Monitored parts," Revision 05, dated April 7, 2005, of the Airbus A330 Maintenance Planning Document, on June 7, 2006 (71 FR 25919, May 3, 2006).

(3) 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>.

(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 August 2, 2011.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.



2011-17-11 The Boeing Company: Amendment 39-16775; Docket No. FAA-2009-1213; Directorate Identifier 2009-NM-097-AD.

Effective Date

(a) This AD is effective September 26, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to The Boeing Company Model DC-9-81 (MD-81), DC-9-82 (MD-82), DC-9-83 (MD-83), DC-9-87 (MD-87), and MD-88 airplanes, certificated in any category; as identified in Boeing Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011.

Subject

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

Unsafe Condition

(e) This AD was prompted by reports of cracking of the wing rear spar lower cap at the outboard flap and inboard drive hinge at station Xrs=164.000; the cracking is due to material fatigue from normal flap operating loads. We are issuing this AD to detect and correct fatigue cracking, which could result in fuel leaks, damage to the wing skin or other structure, and consequent reduced structural integrity of the wing.

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.

Repetitive Inspections and Related Investigative and Corrective Actions

(g) At the applicable times specified in paragraph 1.E. of Boeing Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011, do the actions required by paragraphs (g)(1) and (g)(2) of this AD, except as required by paragraph (i) of this AD. The actions specified in paragraphs (g)(1) and (g)(2) of this AD are not required for Group 1, Configuration 1 airplanes, as identified in Boeing Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011.

(1) Do initial and repetitive eddy current testing high frequency (ETHF) inspections for cracking of the lower rear spar caps of the wings, and do all applicable related investigative and corrective actions, by doing all the applicable actions specified in the Accomplishment Instructions of Boeing

Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011; or in accordance with the procedures specified in paragraph (k) of this AD.

(2) Do initial and repetitive EHF inspections for cracking of any doubler repairs, and do all applicable related investigative and corrective actions, by doing all the applicable actions specified in the Accomplishment Instructions of Boeing Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011; except as required by paragraph (j) of this AD.

Credit for Actions Accomplished in Accordance With Previous Service Information

(h) Actions done before the effective date of this AD in accordance with Boeing Alert Service Bulletin MD80-57A242, dated May 8, 2009, are acceptable for compliance with the corresponding requirements of this AD.

Exceptions to Service Bulletin Specifications

(i) Where Boeing Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011, specifies a compliance time after the date of that service bulletin, this AD requires compliance within the specified compliance time after the effective date of this AD.

(j) If any crack is found during any inspection of a doubler repair, before further flight, repair using a method approved in accordance with the procedures specified in paragraph (k) of this AD.

Alternative Methods of Compliance (AMOCs)

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

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

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

Related Information

(1) For more information about this AD, contact Roger Durbin, Aerospace Engineer, Airframe Branch, ANM-120L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; phone: (562) 627-5233; fax: (562) 627-5210; e-mail: roger.durbin@faa.gov.

Material Incorporated by Reference

(m) You must use Boeing Alert Service Bulletin MD80-57A242, Revision 1, dated January 7, 2011; 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 the service information contained in this AD under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) For service information identified in this AD, Boeing Commercial Airplanes, Attention: Data & Services Management, 3855 Lakewood Boulevard, MC D800-0019, Long Beach, California

90846-0001; telephone 206-544-5000, extension 2; fax 206-766-5683; e-mail dse.boecom@boeing.com; Internet <https://www.myboeingfleet.com>.

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

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on August 8, 2011.

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



2011-17-12 Bombardier, Inc.: Amendment 39-16776. Docket No. FAA-2010-0515; Directorate Identifier 2009-NM-196-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 26, 2011.

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) Bombardier, Inc. Model CL-600-2C10 (Regional Jet Series 700, 701, & 702) airplanes, serial numbers 10003 through 10265 inclusive.

(2) Bombardier, Inc. Model CL-600-2D15 (Regional Jet Series 705) and Model CL-600-2D24 (Regional Jet Series 900) airplanes, serial numbers 15001 through 15192 inclusive.

Subject

(d) Air Transport Association (ATA) of America Code 78: Engine exhaust.

Reason

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

Several cases have been reported of cracks in the joint extrusions securing the outer bondment to the acoustic panel of the nacelle transcowling assemblies. Although there is no effect on flight safety (thrust reverser stowed), thrust reverser deployment under rejected take-off or emergency landing load conditions could potentially result in acoustic panel failure and possible runway debris.

* * * * *

The loss of an acoustic panel during rejected take-off or emergency landing load conditions could leave debris on the runway. This debris, if not removed, creates an unsafe condition for other airplanes during take-off or landing, as those airplanes could impact debris on the runway and sustain damage.

Compliance

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

Inspection, Repair, and Reinforcement

(g) Within 5,000 flight hours or 24 months after the effective date of this AD, whichever occurs first, inspect for the part number and serial number of each transcowl assembly, and, as applicable, the repair status of each transcowl assembly. A review of airplane maintenance records is acceptable in lieu of this inspection if the part number and serial number of each transcowl assembly, and, as applicable, the repair status of each transcowl assembly can be conclusively determined from that review.

(1) If all transcowl assemblies installed on any airplane meet one of the conditions listed in paragraph (g)(1)(i), (g)(1)(ii), or (g)(1)(iii) of this AD, no further action is required by this AD, except paragraph (k) of this AD must be complied with.

(i) Having part number (P/N) KCN624-2003-3, -4, -5, -6, -7, or -8, as listed in Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010.

(ii) Having P/Ns CN624-2001-XXX or KCN624-2001-X (XXX and X mean various dash numbers), with serial number (S/N) SB0965 or higher.

(iii) Having P/Ns CN624-2001-XXX or KCN624-2001-X (XXX and X mean various dash numbers), and repaired in accordance with one of the Bombardier repair engineering orders (REOs) listed in paragraph 1.D. of Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; or paragraph 1.A. of Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010.

(2) If one or more of the transcowl assemblies have P/N CN624-2001-XXX or KCN624-2001-X (XXX and X mean various dash numbers), with S/N SB0964 or lower, and have not been repaired in accordance with one of the Bombardier REOs listed in paragraph 1.D. of Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; or paragraph 1.A. of Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010; do the actions specified in paragraph (i) of this AD.

(h) As of the effective date of this AD, if any high-energy stop occurs and the thrust reversers are deployed above 68% N1, or if a rejected take-off (RTO) occurs and the thrust reversers are deployed above 68% N1: Perform a detailed inspection for cracks of each transcowl assembly (left, right, upper, and lower) before further flight, by doing the actions specified in paragraphs (h)(1), (h)(2), and (h)(3) of this AD. Doing the requirements of paragraph (i) of this AD terminates the requirements of paragraph (h) of this AD.

(1) Open the cowling on the left and right engines.

(2) Do a detailed inspection for cracks of the joint extrusion of the upper and lower transcowl assembly on the left and right engines at the location of the joint piece. If no cracks are found, close the cowlings on the left and right engines.

(3) If any crack is found on one or more transcowl assemblies during the inspection required by paragraph (h)(2) of this AD, before further flight, repair and reinforce the cracked part(s) in accordance with paragraph (i)(1) of this AD.

Note 1: Procedure—Part 3 of Task 05-51-27-210-801 of Chapter 05, Part 2, Volume 1, of the Bombardier CRJ Series Regional Jet Aircraft Maintenance Manual (AMM), CSP B-001, Revision 34, dated November 20, 2010, provides guidance for opening and closing the cowling on the left and right engines.

(i) For transcowl assemblies identified in paragraph (g)(2) of this AD: Except as required by paragraph (h) of this AD, within 5,000 flight hours or 24 months after the effective date of this AD, whichever comes first, do a detailed inspection for cracking on each transcowl assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; or Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010. Accomplishment of the actions specified in paragraph (i)(1) or (i)(2) of

this AD for all transcowl assemblies identified in paragraph (g)(2) of this AD terminates the requirements of paragraph (h) of this AD.

(1) If any cracking of the joint extrusion is found, before further flight, repair and reinforce the joint extrusion on each transcowl assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; or Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010.

(2) If no cracking is found, before further flight, reinforce the joint extrusion on each transcowl assembly, in accordance with the Accomplishment Instructions of Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; or Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010.

Credit for Actions Accomplished in Accordance With Previous Service Information

(j) Inspections, repairs, and reinforcement of the joint extrusion on each transcowl is also acceptable for compliance with the corresponding requirements of paragraph (i) of this AD if done before the effective date of this AD in accordance with the service information listed in table 1 of this AD.

Table 1—Credit Service Information

Document	Revision	Date
Bombardier Service Bulletin 670BA-78-008	Original	September 19, 2008
Bombardier Service Bulletin 670BA-78-008	A	July 10, 2009
Bombardier Service Bulletin 670SH-78-029	Original	July 3, 2008
Bombardier Service Bulletin 670SH-78-029	A	June 30, 2009
Bombardier Service Bulletin 670SH-78-029	B	November 25, 2009

Parts Installation

(k) As of the effective date of this AD, no replacement or spare transcowl assembly having P/N CN624-2001-XXX or KCN624-2001-X (XXX and X mean various dash numbers), with S/N SB0964 or lower, may be installed on any airplane, except for a transcowl assembly on which any repair listed in paragraph 1.D. of Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010, or paragraph 1.A. of Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010, has been done; and except for a transcowl that has been inspected as specified in paragraph (i) of this AD and all applicable actions specified in paragraph (i)(1) or (i)(2) of this AD, as applicable, have been done.

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, 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. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending

information directly to the NYACO, send it to ATTN: Program Manager, Continuing Operational Safety, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

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

Related Information

(m) Refer to MCAI Canadian Airworthiness Directive CF-2009-33, dated July 28, 2009; Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; and Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010; for related information.

Material Incorporated by Reference

(n) You must use Bombardier Service Bulletin 670BA-78-008, Revision B, dated December 22, 2010; and Bombardier Service Bulletin 670SH-78-029, Revision C, dated November 10, 2010; 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.crj@aero.bombardier.com; Internet <http://www.bombardier.com>.

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

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

Issued in Renton, Washington, on August 8, 2011.

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



2011-17-16 Airbus: Amendment 39-16780. Docket No. FAA-2011-0385; Directorate Identifier 2010-NM-256-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 26, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to airplanes specified in paragraphs (c)(1), (c)(2), and (c)(3) of this AD, certificated in any category.

(1) Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, and -343 airplanes, all manufacturer serial numbers on which Airbus modification 49144 (install electrical rudder) has been embodied in production, except those on which Airbus modification 58118 and Airbus modification 200667 have been embodied in production.

(2) Airbus Model A340-311, -312, and -313 airplanes, all manufacturer serial numbers on which Airbus modification 49144 has been embodied in production, except those on which Airbus modification 58118 and Airbus modification 200667 have been embodied in production.

(3) Airbus Model A340-541 and -642 airplanes, all manufacturer serial numbers, except those on which Airbus modification 200667 has been embodied in production.

Subject

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

Reason

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

During a Back-up Control Module (BCM) retrofit campaign * * *, some BCMs have been found with loose gyrometer screws.

* * * When the aeroplane is in control back up configuration (considered to be an extremely remote case), an oscillation of the BCM output order may cause degradation of the BCM piloting laws, potentially leading to erratic motion of the rudder and possible subsequent impact on the Dutch Roll, which constitutes an unsafe condition.

* * * * *

* * * [S]everal Pedal Feel Trim Units (PFTU) have been found with loose or broken screws during the accomplishment of maintenance tasks on A330 fitted with electrical rudder and A340-600. The loose or failed screws could lead to the loss of the coupling

between the Rotary Variable Differential Transducer (RVDT) shaft and the PFTU shaft, and consequently to a potential rudder runaway when the BCM is activated.

* * * * *

The unsafe condition is loss of control 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.

Dispatch Prohibition

(g) As of the effective date of this AD, dispatch with the flight control primary computer (FCPC) 3 "PRIM 3" inoperative is prohibited unless the applicable modifications required by this AD have been done within the compliance time in this AD.

Airplane Flight Manual (AFM) Revision

(h) Within 30 days after the effective date of this AD, revise the Limitations section of the Airbus A330 or A340 AFM, as applicable, to include the following statement: "Dispatch with the flight control primary computer (FCPC) 3 "PRIM 3" inoperative is prohibited." This may be done by inserting a copy of this AD into the applicable AFM.

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

Modification

(i) For Airbus Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -323, -341, -342, -343, and A340-311, -312, and -313 series airplanes: Within 48 months after the effective date of this AD, do the actions specified in paragraphs (i)(1) and (i)(2) of this AD:

(1) Modify the BCM, in accordance with the Accomplishment Instruction of Airbus Service Bulletin A330-27-3161 (for Model A330-201, -202, -203, -223, -223F, -243, -243F, -301, -302, -303, -321, -322, -341, -343 airplanes) or A340-27-4160 (for Model A340-311, -312, and -313 airplanes), both dated November 6, 2009.

(2) Modify the PFTU, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A330-27-3169 or A340-27-4167, both dated May 3, 2010, as applicable.

(j) For Airbus Model 340-541 and -642 airplanes: Within 48 months after the effective date of this AD, modify the PFTU, in accordance with the Accomplishment Instructions of Airbus Mandatory Service Bulletin A340-27-5053, dated May 3, 2010.

Terminating Action

(k) Modifying both the BCM and PFTU as required by paragraphs (i)(1) and (i)(2) of this AD terminates the requirements of paragraphs (g) and (h) of this AD.

(l) Modifying the PFTU as required by paragraph (j) of this AD terminates the requirements in paragraphs (g) and (h) of this AD.

FAA AD Differences

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

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: 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. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

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

Related Information

(n) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2010-0191, dated September 27, 2010 [Corrected October 7, 2010], and the service bulletins listed in table 1 of this AD, for related information.

Table 1—Airbus Service Bulletins

Document	Date
Airbus Mandatory Service Bulletin A330-27-3169	May 3, 2010
Airbus Mandatory Service Bulletin A340-27-4167	May 3, 2010
Airbus Mandatory Service Bulletin A340-27-5053	May 3, 2010
Airbus Service Bulletin A330-27-3161	November 6, 2009
Airbus Service Bulletin A340-27-4160	November 6, 2009

Material Incorporated by Reference

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

(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.

Table 2—Material Incorporated by Reference

Document	Date
Airbus Mandatory Service Bulletin A330-27-3169	May 3, 2010
Airbus Mandatory Service Bulletin A340-27-4167	May 3, 2010
Airbus Mandatory Service Bulletin A340-27-5053	May 3, 2010
Airbus Service Bulletin A330-27-3161	November 6, 2009
Airbus Service Bulletin A340-27-4160	November 6, 2009

Issued in Renton, Washington on August 10, 2011.

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



2011-18-01 General Electric Company: Amendment 39-16783; Docket No. FAA-2010-0998; Directorate Identifier 2010-NE-29-AD.

Effective Date

(a) This AD is effective September 26, 2011.

Affected ADs

(b) None.

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, CF6-50E, CF6-50E1, and CF6-50E2 series turbofan engines, including engines marked on the engine data plate as CF6-50C2-F and CF6-50C2-R, with a low-pressure turbine (LPT) rotor stage 3 disk that has a part number (P/N) listed in Table 1 of this AD installed.

Table 1—LPT Rotor Stage 3 Disk P/Ns

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

Unsafe Condition

(d) This AD results from seven reports of uncontained failures of LPT rotor stage 3 disks and eight reports of cracked LPT rotor stage 3 disks found during shop visit inspections. We are issuing this AD to prevent LPT rotor separation, 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 at each shop visit after the effective date of this AD, at which the LPT module assembly is separated from the engine.

Initial Inspection

(f) At the next shop visit after the effective date of this AD, clean and fluorescent-penetrant inspect the LPT rotor stage 3 disk forward spacer arm, including the use of a wet-abrasive blast to eliminate residual or background fluorescence before inspecting. You can find guidance on cleaning the disk and performing the FPI in the CF6-50 Engine Manual, GEK 50481 72-57-02.

Repetitive Inspection

(g) Thereafter, clean and inspect the LPT rotor stage 3 disk forward spacer arm, as specified in paragraph (f) of this AD, at each engine shop visit that occurs after 1,000 cycles since the last FPI of the LPT rotor stage 3 disk forward spacer arm.

(h) If a crack or a band of fluorescence is present, remove the disk from service.

Definitions

(i) For the purpose of this AD:

(1) The LPT module assembly is defined as consisting of turbine mid-frame, LPT stage 1 nozzle, LPT stator cases and vanes, LPT rotor, and turbine rear frame.

(2) An engine shop visit is the induction of an engine into the shop for maintenance involving the separation of the turbine mid-frame forward flange from the compressor rear frame aft flange, except that the separation of these engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

Alternative Methods of Compliance

(j) 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

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

Material Incorporated by Reference

(l) None.

Issued in Burlington, Massachusetts on August 15, 2011.

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



2011-18-02 General Electric Company: Amendment 39-16784 ; Docket No. FAA-2011-0187; Directorate Identifier 2011-NE-07-AD.

Effective Date

(a) This AD is effective September 26, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to General Electric Company (GE) CF34-10E2A1; CF34-10E5; CF34-10E5A1; CF34-10E6; CF34-10E6A1; CF34-10E7; and CF34-10E7-B turbofan engines, with a fan rotor spinner part number (P/N) 2050M34G03; 2050M34G04; 2050M34G05; 2050M34G06; 2437M60G01; or 2437M60G02, installed.

Unsafe Condition

(d) This AD was prompted by a fan rotor spinner support found cracked at the attachment lugs. We are issuing this AD to prevent high-cycle fatigue cracking of the fan rotor spinner support attachment lugs, leading to separation of the fan rotor spinner assembly, uncontained failure of the engine, and damage to the airplane.

Compliance

(e) Comply with this AD within 1,800 hours-in-service after the effective date of this AD, unless already done.

Removal of Fan Rotor Blade Retainers

(f) Remove from service the 24 fan rotor blade retainers, P/N 2050M56P02.

Removal of Fan Rotor Spinner Support

(g) Remove from service the fan rotor spinner support that operated with the fan rotor blade retainers removed in paragraph (f) of this AD.

Installation Prohibition

(h) After the effective date of this AD, do not install any fan rotor blade retainer, P/N 2050M56P02, into any engine. Do not attempt to repair, make serviceable, or re-install, this part.

(i) After the effective date of this AD, do not install any fan rotor spinner support removed in paragraph (g) of this AD, into any engine. Do not attempt to repair, make serviceable, or re-install, this part.

Alternative Methods of Compliance (AMOCs)

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

Related Information

(k) For more information about this AD, contact John Frost, Aerospace Engineer, Engine Certification Office, FAA, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7756; fax: 781-238-7199; e-mail: john.frost@faa.gov.

(l) Refer to GE Service Bulletin No. CF34-10E S/B 72-0186, for related information. Contact GE-Aviation, M/D Rm. 285, One Neumann Way, Cincinnati, OH 45215, phone: 513-552-3272; e-mail: geae.aoc@ge.com, for a copy of this service information. You may review copies of the referenced service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Issued in Burlington, Massachusetts, on August 15, 2011.
Peter A. White,
Manager, Engine & Propeller Directorate,
Aircraft Certification Service.



2011-18-03 The Boeing Company: Amendment 39-16785; Docket No. FAA-2007-28661; Directorate Identifier 2007-NM-013-AD.

Effective Date

(a) This AD is effective September 30, 2011.

Affected ADs

(b) Accomplishing certain requirements of this AD terminates certain requirements of AD 2001-08-24, Amendment 39-12201 (66 FR 20733, April 25, 2001); AD 2002-24-51, Amendment 39-12992 (68 FR 10, January 2, 2003); and AD 2008-24-51, Amendment 39-15781 (74 FR 8155, February 24, 2009). Airworthiness Directive 2002-19-52, Amendment 39-12900 (67 FR 61253, September 30, 2002), is affected by this AD.

Applicability

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

(1) The Boeing Company Model 737-600, -700, -700C, -800, and -900 series airplanes, identified in Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009.

(2) The Boeing Company Model 737-600, -700, -700C, -800, and -900 series airplanes, identified in Boeing Alert Service Bulletin 737-28A1248, Revision 2, dated August 28, 2009.

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

Subject

(d) Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 28, Fuel.

Unsafe Condition

(e) This AD was prompted by fuel system reviews conducted by the manufacturer. We are issuing this AD to prevent center tank fuel pump operation with continuous low pressure, which could lead to friction sparks or overheating in the fuel pump inlet that could create a potential ignition source inside the center fuel tank. These conditions, in combination with flammable fuel vapors, could result in a center fuel tank explosion and consequent loss of the airplane.

Compliance

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

Installation of Automatic Shutoff System for the Center Tank Fuel Boost Pumps

(g) For airplanes identified in paragraph 1.A.1. of Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009: Within 36 months after the effective date of this AD, install an automatic shutoff system for the center tank fuel boost pumps, by accomplishing all of the actions specified in Part 1 and Part 2 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009, except that Figure 1 of this AD must be used in lieu of Sheet 2 of Figure 11 of Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009. If a placard has been previously installed on the airplane in accordance with paragraph (h) of this AD, the placard may be removed from the flight deck of only that airplane after the automatic shutoff system has been installed. Installing automatic shutoff systems on all airplanes in an operator's fleet, in accordance with this paragraph, terminates the placard installation required by paragraph (h) of this AD for all airplanes in an operator's fleet.

Note 2: Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009, refers to Boeing Component Service Bulletin 233A3202-28-03, dated January 12, 2006, as an additional source of guidance for replacing the left and right center boost pump switches of the P5-2 fuel control module assembly with new switches and changing the wiring of the P5-2 fuel control module assembly.

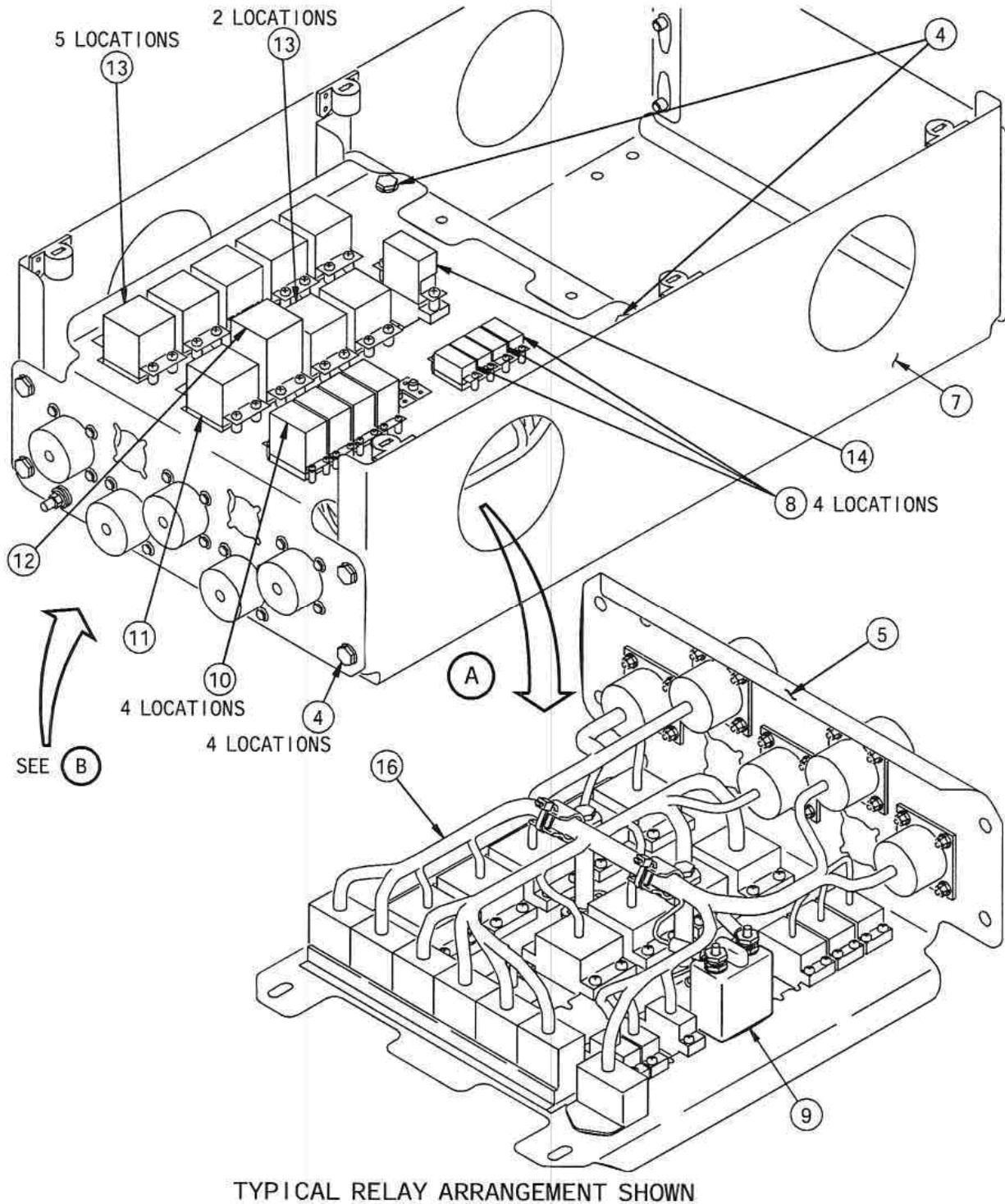


Figure 1

Placard Installation for Mixed Fleet Operation

(h) Prior to or concurrently with installing an automatic shutoff system on any airplane in an operator's fleet, as required by paragraph (g) of this AD, install a placard adjacent to the pilot's primary flight display on all airplanes in the operator's fleet that are not equipped with an automatic shutoff system for the center tank fuel boost pumps. The placard must read as follows (unless alternative placard wording is approved by an appropriate FAA Principal Operations Inspector):

"AD 2002-24-51 fuel usage restrictions required."

Installing an automatic shutoff system, in accordance with paragraph (g) of this AD, terminates the placard installation required by this paragraph for only that airplane. Installing automatic shutoff systems on all airplanes in an operator's fleet, in accordance with paragraph (g) of this AD, terminates the placard installation required by this paragraph for all airplanes in an operator's fleet. If operation according to the fuel usage restrictions of AD 2002-24-51, Amendment 39-12992 (68 FR 10, January 2, 2003), and AD 2001-08-24, Amendment 39-12201 (66 FR 20733, April 25, 2001), is maintained until automatic shutoff systems are installed on all airplanes in an operator's fleet, the placard installation specified in this paragraph is not required. Installation of a placard in accordance with paragraph (e) of AD 2002-19-52, Amendment 39-12900 (67 FR 61253, September 30, 2002), is acceptable for compliance with the placard installation requirements of this paragraph; however, terminating action specified in paragraph (g) of AD 2002-19-52 and installation of an automatic shutoff system required by paragraph (g) of this AD must be accomplished on the airplane before the placard is removed from the airplane.

Airplane Flight Manual (AFM) Revision

(i) For airplanes on which Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009, has been accomplished: At the applicable time specified in paragraph (i)(1) or (i)(2) of this AD, do the actions specified in paragraphs (i)(3) and (i)(4) of this AD.

(1) For airplanes on which the terminating action specified in paragraph (g) of AD 2002-19-52, Amendment 39-12900 (67 FR 61253, September 30, 2002), has been done: Concurrently with accomplishing the actions required by paragraph (g) of this AD.

(2) For airplanes on which the terminating action specified in paragraph (g) of AD 2002-19-52, Amendment 39-12900 (67 FR 61253, September 30, 2002), has not been done: Concurrently with accomplishing the terminating action specified in paragraph (g) of AD 2002-19-52.

(3) Revise Section 1 of the Limitations section of the Boeing 737-600/-700/-700C/-800/-900 AFM to include the following statement. This may be done by inserting a copy of this AD into the AFM.

"Center Tank Fuel Pumps

Intentional dry running of a center tank fuel pump (low pressure light illuminated) is prohibited."

Note 3: For clarification purposes, the AFM limitations required by AD 2002-19-52, Amendment 39-12900 (67 FR 61253, September 30, 2002), continue to be required until the optional terminating actions specified in paragraph (g) of AD 2002-19-52 have been done.

(4) Revise Section 3 of the Normal Procedures section of the Boeing 737-600/ -700/-700C/-800/-900 AFM to include the following statements. This may be done by inserting a copy of this AD into the AFM. Alternative statements that meet the intent of the following requirements may be used if approved by an appropriate FAA Principal Operations Inspector.

"CENTER TANK FUEL PUMPS

Alternative Method of Compliance (AMOC) to AD 2001-08-24 and AD 2002-24-51 for Aircraft With the Automated Center Tank Fuel Pump Shutoff

Center tank fuel pumps must not be "ON" unless personnel are available in the flight deck to monitor low pressure lights.

For ground operation, center tank fuel pump switches must not be positioned "ON" unless the center tank fuel quantity exceeds 1000 pounds (453 kilograms), except when defueling or transferring fuel. Upon positioning the center tank fuel pump switches "ON" verify momentary illumination of each center tank fuel pump low pressure light.

For ground and flight operations, the corresponding center tank fuel pump switch must be positioned "OFF" when a center tank fuel pump low pressure light illuminates [1]. Both center tank fuel pump switches must be positioned "OFF" when the first center tank fuel pump low pressure light illuminates if the center tank is empty.

[1] When established in a level flight attitude, both center tank pump switches should be positioned "ON" again if the center tank contains usable fuel.

Defueling and Fuel Transfer

When transferring fuel or defueling center or main tanks, the fuel pump low pressure lights must be monitored and the fuel pumps positioned to "OFF" at the first indication of the fuel pump low pressure [1].

Defueling the main tanks with passengers on board is prohibited if the main tank fuel pumps are powered [2].

Defueling the center tank with passengers on board is prohibited if the center tank fuel pumps are powered and the auto-shutoff system is inhibited [2].

[1] Prior to transferring fuel or defueling, conduct a lamp test of the respective fuel pump low pressure lights.

[2] Fuel may be transferred from tank to tank or the aircraft may be defueled with passengers on board, provided fuel quantity in the tank from which fuel is being taken is maintained at or above 2000 pounds (907 kilograms)."

Note 4: When statements identical to those in paragraphs (i)(3) and (i)(4) of this AD have been included in the general revisions of the Boeing 737-600/-700/-700C/-800/-900 AFM, the general revisions may be inserted into that AFM, and the copy of this AD may be removed from that AFM.

Installation of Secondary Pump Control Relays

(j) For airplanes identified in paragraph 1.A.1. of Boeing Alert Service Bulletin 737-28A1248, Revision 2, dated August 28, 2009: Within 60 months after the effective date of this AD, install one secondary control relay for the electrical control circuit of each of the two center tank fuel boost pumps, in accordance with the Accomplishment Instructions of Boeing Alert Service Bulletin 737-28A1248, Revision 2, dated August 28, 2009.

Airworthiness Limitations (AWL) Revision for AWL No. 28-AWL-23

(k) For airplanes identified in paragraph 1.A.1. of Boeing Alert Service Bulletin 737-28A1248, Revision 2, dated August 28, 2009: Concurrently with accomplishing the actions required by paragraph (j) of this AD, or within 30 days after the effective date of this AD, whichever occurs later, revise the maintenance program by incorporating AWL No. 28-AWL-23 of Subsection E, AWLs– Fuel Systems, of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance

Requirements (CMRs), of the Boeing 737-600/700/800/900 MPD Document, D626A001-CMR, Revision March 2011. The initial compliance time for the actions specified in AWL No. 28-AWL-23 is within 1 year after accomplishing the installation required by paragraph (j) of this AD, or within 1 year after the effective date of this AD, whichever occurs later.

No Alternative Inspections or Inspection Intervals

(l) After accomplishing the applicable actions specified in paragraph (k) of this AD, no alternative inspections or inspection intervals may be used unless the inspections or inspection intervals are approved as an AMOC in accordance with the procedures specified in paragraph (u) of this AD.

Terminating Action for AD 2001-08-24, Amendment 39-12201 (66 FR 20733, April 25, 2001)

(m) Accomplishing the actions required by paragraphs (g), (h), and (i) of this AD, or accomplishing the actions specified in paragraph (s) of this AD, terminates the requirements of paragraph (a) of AD 2001-08-24, Amendment 39-12201 (66 FR 20733, April 25, 2001), for Model 737-600, -700, -700C, -800, and -900 series airplanes that have the automatic shutoff system, or a TDG Aerospace, Inc., universal fault interrupter (UFI), installed. After accomplishing the actions required by paragraphs (g), (h), and (i) of this AD, or accomplishing the actions specified in paragraph (s) of this AD, the AFM limitation required by paragraph (a) of AD 2001-08-24 may be removed from the AFM for those airplanes.

Terminating Action for AD 2002-24-51, Amendment 39-12992 (68 FR 10, January 2, 2003)

(n) Accomplishing the actions required by paragraphs (g), (h), and (i) of this AD, or accomplishing the actions specified in paragraph (s) of this AD, terminates the requirements of paragraph (b) of AD 2002-24-51, Amendment 39-12992 (68 FR 10, January 2, 2003), for Model 737-600, -700, -700C, -800, and -900 series airplanes that have the automatic shutoff system, or a TDG Aerospace, Inc., UFI, installed. After accomplishing the actions required by paragraphs (g), (h), and (i) of this AD, or accomplishing the actions specified in paragraph (s) of this AD, the AFM limitations required by paragraph (b) of AD 2002-24-51 may be removed from the AFM for those airplanes.

Terminating Action for AWL Revision

(o) Incorporating AWL No. 28-AWL-23 into the maintenance program in accordance with paragraph (g)(3) of AD 2008-10-10 R1, Amendment 39-16164 (75 FR 1529, January 12, 2010), terminates the corresponding action required by paragraph (k) of this AD.

Terminating Action for AD 2008-24-51, Amendment 39-15781 (74 FR 8155, February 24, 2009)

(p) Accomplishing the actions required by paragraph (g) of this AD terminates the requirements of paragraph (f) of AD 2008-24-51, Amendment 39-15781 (74 FR 8155, February 24, 2009).

Credit for Actions Accomplished in Accordance With Previous Service Information

(q) Actions accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 737-28A1248, dated December 21, 2006; or Boeing Alert Service Bulletin 737-28A1248, Revision 1, dated January 9, 2008; are considered acceptable for compliance with the corresponding actions specified in paragraph (j) of this AD.

(r) Actions accomplished before the effective date of this AD in accordance with Boeing Alert Service Bulletin 737-28A1206, dated January 11, 2006; or Revision 1, dated January 30, 2008; are considered acceptable for compliance with the corresponding actions specified in paragraph (g) of this AD, provided one of the actions specified in paragraph (r)(1) or (r)(2) of this AD have been done.

(1) The procedures specified in paragraph (f) of AD 2008-24-51, Amendment 39-15781 (74 FR 8155, February 24, 2009), have been accomplished.

(2) The actions specified in Part 3 of the Accomplishment Instructions of Boeing Alert Service Bulletin 737-28A1206, Revision 2, dated May 21, 2009, have been accomplished.

Optional Terminating Action

(s) Installing TDG Aerospace, Inc., UFI, in accordance with a method approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA, within 36 months after the effective date of this AD, terminates the actions required by paragraphs (g) through (k) of this AD; provided that, concurrently with installing a UFI on any airplane in an operator's fleet, a placard is installed adjacent to the pilot's primary flight display on all airplanes in the operator's fleet not equipped with a UFI or an automatic shutoff system. The placard must read as follows (unless alternative placard wording is approved by an appropriate FAA Principal Operations Inspector):

"AD 2002-24-51 fuel usage restrictions required."

Installation of a placard in accordance with paragraph (h) of this AD is acceptable for compliance with the placard installation required by this paragraph. Installing a TDG Aerospace, Inc., UFI in accordance with this paragraph on an airplane terminates the placard installation required by this paragraph for only that airplane. Installing TDG Aerospace, Inc., UFIs in accordance with this paragraph, or automatic shutoff systems in accordance with paragraph (g) of this AD, on all airplanes in an operator's fleet terminates the placard installation required by this paragraph for all airplanes in an operator's fleet. If operation according to the fuel usage restrictions of AD 2002-24-51, Amendment 39-12992 (68 FR 10, January 2, 2003), and AD 2001-08-24, Amendment 39-12201 (66 FR 20733, April 25, 2001), is maintained until UFIs or automatic shutoff systems are installed on all airplanes in an operator's fleet, the placard installation specified in this paragraph is not required. Installation of a placard in accordance with paragraph (e) of AD 2002-19-52, Amendment 39-12900 (67 FR 61253, September 30, 2002), is acceptable for compliance with the placard installation requirements of this paragraph; however, terminating action specified in paragraph (g) of AD 2002-19-52 and installation of a UFI specified by this paragraph must be accomplished on the airplane before the placard is removed from the airplane.

Note 5: Guidance on installing a TDG Aerospace, Inc., UFI can be found in TDG Aerospace, Inc., Supplemental Type Certificate (STC) ST02076LA.

Credit for Actions Accomplished in Accordance With Previous Service Information

(t) Revising the maintenance program by incorporating AWL No. 28-AWL-23 of a revision specified in paragraphs (t)(1) through (t)(12) of this AD of Subsection G, Airworthiness Limitations–Fuel System AWLs, of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), of the Boeing 737-600/700/800/900 MPD Document, D626A001-CMR; or Subsection E, AWLs–Fuel Systems, of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), of the Boeing 737-600/700/800/900 MPD Document, D626A001-CMR, Revision February 2011; before the effective date of this AD is considered acceptable for compliance with the corresponding actions specified in paragraph (k) of this AD.

- (1) Revision March 2008.
- (2) Revision April 2008.
- (3) Revision June 2008.
- (4) Revision February 2009.
- (5) Revision March 2009.
- (6) Revision August 2009.
- (7) Revision September 2009.
- (8) Revision November 2009.
- (9) Revision January 2010.
- (10) Revision May 2010.
- (11) Revision July 2010.
- (12) Revision August 2010.

Alternative Methods of Compliance (AMOCs)

(u)(1) The Manager, Seattle ACO, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD. Information may be e-mailed to: 9-ANM-Seattle-ACO-AMOC-Requests@faa.gov.

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

Related Information

(v) For more information about this AD, contact Tak Kobayashi, Aerospace Engineer, Propulsion Branch, ANM-140S, FAA, Seattle Aircraft Certification Office, 1601 Lind Ave., SW., Renton, Washington 98057-3356; phone: (425) 917-6499; fax (425) 917-6590; e-mail: Takahisa.Kobayashi@faa.gov.

Material Incorporated by Reference

(w) You must use the service information contained in table 1 of this AD, as applicable, to do the actions required by this AD, unless the AD specifies otherwise.

Table 1—All Material Incorporated by Reference

Document	Revision	Date
Boeing Alert Service Bulletin 737-28A1206	2	May 21, 2009
Boeing Alert Service Bulletin 737-28A1248	2	August 28, 2009
AWL No. 28-AWL-23 of Subsection E, AWLs – Fuel Systems of Section 9, Airworthiness Limitations (AWLs) and Certification Maintenance Requirements (CMRs), of the Boeing 737-600/700/800/900 Maintenance Planning Data Document, D626A001-CMR	March 2011	March 2011

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

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

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

(4) You may also review copies of the service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at an NARA facility, call 202-741-6030, or go to http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

Issued in Renton, Washington, on August 12, 2011.

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



2011-18-05 Saab AB, Saab Aerosystems: Amendment 39-16787. Docket No. FAA-2011-0476; Directorate Identifier 2010-NM-247-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 30, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Saab AB, Saab Aerosystems Model SAAB 2000 airplanes, certificated in any category, all serial numbers.

Subject

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

Reason

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

Corrosion damage has been found on the aft pressure bulkhead of SAAB 2000 aeroplanes, located on the rear side of the bulkhead at the bottom outboard flange. Corrosion damage in this area can become the starting point for future crack initiation and propagation.

This condition, if not detected and corrected, could affect the structural integrity of the aft pressure bulkhead, possibly resulting in in-flight decompression of the fuselage and injury to occupants.

* * * * *

Compliance

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

Inspection and Corrective Actions

(g) Within 12 months after the effective date of this AD: Do a detailed inspection for corrosion of the aft pressure bulkhead at the bottom outboard flange, and to determine if there is a drain hole on the left-hand side inboard of the ventral fin, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-53-048, Revision 01, dated September 3, 2009.

(h) If any corrosion is found during the inspection required by paragraph (g) of this AD: Before further flight, repair the corrosion in accordance with a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or its delegated agent.

(i) If no drain hole is found during the inspection required by paragraph (g) of this AD, before further flight, drill a drain hole, in accordance with the Accomplishment Instructions of Saab Service Bulletin 2000-53-048, Revision 01, dated September 3, 2009.

(j) Within 30 days after accomplishing the inspection required by paragraph (g) of this AD, or within 30 days after the effective date of this AD, whichever is later: Report findings of corrosion to Saab at Saab AB, Saab Aerosystems, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; e-mail saab2000.techsupport@saabgroup.com. Under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements contained in this AD and has assigned OMB Control Number 2120 0056.

Credit for Actions Accomplished in Accordance With Previous Service Information

(k) Actions done before the effective date of this AD in accordance with Saab Service Bulletin 2000-53-048, dated July 6, 2009, are considered acceptable for compliance with the corresponding actions required by paragraph (g) 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

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue, SW., Renton, Washington 98057-3356; telephone (425) 227-1112; fax (425) 227-1149. Information may be e-mailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

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

(3) Reporting Requirements: A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for

reducing the burden should be directed to the FAA at: 800 Independence Ave., SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

Related Information

(m) Refer to MCAI EASA Airworthiness Directive 2010-0184, dated September 6, 2010; and Saab Service Bulletin 2000-53-048, Revision 01, dated September 3, 2009; for related information.

Material Incorporated by Reference

(n) You must use Saab Service Bulletin 2000-53-048, Revision 01, dated September 3, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Saab AB, Saab Aerosystems, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; e-mail saab2000.techsupport@saabgroup.com; Internet <http://www.saabgroup.com>.

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

(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 August 12, 2011.

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



2011-18-08 Bombardier, Inc.: Amendment 39-16790. Docket No. FAA-2011-0907; Directorate Identifier 2011-NM-146-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective September 9, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Bombardier, Inc. Model CL-600-2B19 (Regional Jet Series 100 & 440) airplanes, certificated in any category, serial numbers 7003 and subsequent.

Subject

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

Reason

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

There has been one reported case of an aft equipment bay fire occurring due to arcing of chafed integrated drive generator (IDG) power cables. Additionally, the hydraulic line support brackets located at the fuselage station (FS) 672 have been found broken in service on several aeroplanes. A broken hydraulic line support bracket at FS 672 could result in inadequate clearance between the IDG power cables and hydraulic lines, potentially resulting in chafing of the IDG power cables. Chafed IDG power cables can generate high energy arcing, which can result in an uncontrolled fire in the aft equipment bay.

* * * * *

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 45 days after the effective date of this AD, do a detailed inspection for chafed or damaged IDG power cables from fuselage station FS652 to FS672, between stringers 8R and 10R, and for cracked or broken hydraulic line support brackets at FS672.

(1) If chafing or damage is found on any IDG power cable, before further flight, replace the IDG power cable using a method approved by either the Manager, New York Aircraft Certification Office (ACO), ANE-170, FAA, or Transport Canada Civil Aviation (TCCA) (or its delegated agent).

(2) If any cracking or breaking is found on any hydraulic line support bracket at FS672, before further flight, replace the hydraulic line support bracket using a method approved by either the Manager, New York ACO, ANE-170, FAA, or TCCA (or its delegated agent).

Reporting

(h) Submit a report of the findings of the inspection required by paragraph (g) of this AD to Bombardier Regional Aircraft Customer Response Center, 13100 Boulevard Henri-Fabre, Mirabel, Quebec, Canada J7N 3C6; telephone: 1-514-855-8500; fax: 1-514-855-8501; e-mail: thd.crj@aero.bombardier.com, at the applicable time specified in paragraph (h)(1) or (h)(2) of this AD. The report must include any finding of chafing of the IDG power cable or broken hydraulic line support bracket, the airplane serial number, and the number of landings and flight hours on the airplane.

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

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

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, New York Aircraft Certification Office (ACO), ANE-170, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the ACO, send it to ATTN: Program Manager, Continuing Operational Safety, FAA, New York ACO, 1600 Stewart Avenue, Suite 410, Westbury, New York 11590; telephone 516-228-7300; fax 516-794-5531. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

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

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

Related Information

(j) Refer to MCAI Canadian Airworthiness Directive CF-2011-18, dated July 7, 2011, for related information.

Material Incorporated by Reference

(k) None.

Issued in Renton, Washington, on August 12, 2011.
Ali Bahrami,
Manager, Transport Airplane Directorate,
Aircraft Certification Service.



DATE: August 17, 2011

AD #: 2011-18-51

Emergency airworthiness directive (AD) 2011-18-51 is sent to owners and operators of airplanes with Honeywell International, Inc. TPE331 model turboprop engines installed.

Background

This emergency AD was prompted by an excessive failure rate of part manufacturer approval (PMA) main shaft bearings, part number (P/N) 3108098-1WD, manufactured by Dixie Aerospace, LLC, installed in Honeywell International, Inc. TPE331 model turboprop engines. The bearings were manufactured with inadequate inner ring guide flange clearance. The main shaft axial compressive loads combined with the inadequate clearance have a high probability of leading to a condition where the rollers are pinched between the inner ring guide flanges, leading to premature bearing failure and engine main rotor seizure. The bearing failure mechanism is severe and sudden. This condition, if not corrected, could result in engine main rotor seizure resulting in engine damage, shutdown, and damage to the airplane.

FAA's Determination

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

AD Requirements

This AD requires an inspection of records to determine if a Dixie Aerospace, LLC main shaft bearing, P/N 3108098-1WD, is installed in Honeywell International, Inc. TPE331 model turboprop engines. Within 10 operating hours, affected bearings must be removed from service.

Authority for this Rulemaking

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

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

Presentation of the Actual AD

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

2011-18-51 Honeywell International, Inc.: Directorate Identifier 2011-NE-28-AD.

Effective Date

(a) This Emergency AD is effective upon receipt.

Affected ADs

(b) None.

Applicability

(c) This emergency AD applies to all Honeywell International, Inc. TPE331 model turboprop engines with a Dixie Aerospace, LLC main shaft bearing, P/N 3108098-1WD, installed.

Unsafe Condition

(d) This AD was prompted by a report of a main shaft bearing seizure event occurring after about 100 operating hours after installation of a part manufacturer approval (PMA) main shaft bearing, part number (P/N) 3108098-1WD, manufactured by Dixie Aerospace, LLC. This bearing failure mechanism is severe and sudden. We are issuing this AD to prevent engine main rotor seizure resulting in engine damage, shutdown, and damage to the airplane.

Compliance

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

(f) For all airplanes with a Honeywell International, Inc. TPE331 model turboprop engine installed, where the engine was overhauled or replaced since February 1, 2010:

(1) Within 10 operating hours, inspect the airplane records to determine if a Dixie Aerospace, LLC main shaft bearing, P/N 3108098-1WD, is installed in the engine.

(2) Remove all Dixie Aerospace, LLC main shaft bearings, P/N 3108098-1WD, from service, before further flight.

Alternative Methods of Compliance (AMOCs)

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

Related Information

(h) For further information about this AD, contact: Juanita Craft, Aerospace Engineer, Atlanta Aircraft Certification Office, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, GA 30337; phone: 404-474-5584; fax: 404-474-5606; e-mail: juanita.craft@faa.gov.

Issued in Burlington, Massachusetts, on August 17, 2011.

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