



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS,
BALLOONS, & AIRSHIPS**

BIWEEKLY 2010-25

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SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
Biweekly 2010-01			
2009-26-05		Pilatus Aircraft Ltd	PC-7
2009-26-07	S 2009-12-51	Turbomeca	Engine: Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
2009-26-08	S 2006-21-12	AeroSpace Technologies of Australia Pty Ltd	N22B, N22S, and N24A
2009-26-12	S 2008-19-05	Engine Components, Inc. (ECi)	See AD
Biweekly 2010-02			
2009-21-08 R1		PIAGGIO AERO INDUSTRIES S.p.A.	P-180
2010-01-03		Fire Fighting Enterprises Limited	See AD
2010-02-01		Turbomeca S.A	Arriel 1B, 1D, and 1D1
2010-02-51	E	AGUSTA S.p.A	A109A, A109A II, A109C, and A109K2
Biweekly 2010-03			
2009-19-51		Agusta S.p.A	AB139 and AW139
2009-26-11	S 2006-07-15	Thrush Aircraft, Inc.	See AD
2010-02-07		Eurocopter France	Rotorcraft: SE3160, SA315B, SA316B, SA316C, and SA319B
2010-02-08		Turbomeca	Engine: Turmo IV A and IV C
2010-03-01		Eurocopter France	Rotorcraft: AS332L1, AS332L2, and EC225LP
2010-03-02		Lifesaving Systems Corp.	Appliance
Biweekly 2010-04			
2009-23-51		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2010-03-03		Bell Helicopter Textron, Inc	Rotorcraft: 205B and 212
2010-03-04		PIAGGIO AERO INDUSTRIES S.p.A	P-180
2010-03-06		Turbomeca	Engine: Arriel 2B and 2B1
2010-03-09		Piaggio Aero Industries S.p.A	P-180
Biweekly 2010-05			
2010-04-05	S 2003-12-05	McCauley Propeller Systems	Propeller: 1A103/TCM
2010-04-06		Thielert Aircraft Engines GmbH	Engine: TAE 125-01
2010-04-07		Turbomeca	Engine: Arriel 2S1
2010-04-11		Extra Flugzeugproduktions- und Vertriebs- GmbH	EA-300/200, EA-300/L
2010-04-14		Augustair, Inc	2150, 2150 ^a , 2180
2010-04-15		SCHEIBE-Flugzeugbau GmbH	Glider: SF 25C
2010-04-16		SICLI	Appliance: portable fire extinguishers
2010-05-02	S 2009-08-10	Pilatus Aircraft Ltd	PC-12/47E
2010-05-51	E	Eurocopter	Rotorcraft: EC120B
Biweekly 2010-06			
2010-05-10		Hawker Beechcraft	B300, B300C
2010-06-02		Hawker Beechcraft	G58

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Biweekly 2010-07			
2010-06-03		Eurocopter France	Rotorcraft: AS355E, AS355F, AS355F1, AS355F2, and AS355N
2010-06-06	S 99-16-13	MD Helicopters, Inc	Rotorcraft: MD-900
2010-06-07		Eurocopter France	Rotorcraft: AS 332 C, L, L1, and L2; AS 350 B3; AS355 F, F1, F2, and N; SA 365N and N1; AS 365 N2 and N3; SA 366G1; EC 130 B4; and EC 155B and B1
2010-06-08		Sikorsky Aircraft Corporation	Rotorcraft: S-76C
2010-06-11		Honeywell International Inc.	Engine: TFE731-2, TFE731-2A, TFE731-2C, TFE731-3, TFE731-3A, TFE731-3AR, TFE731-3B, TFE731-3BR, TFE731-3C, TFE731-3CR, TFE731-3D, TFE731-3DR, TFE731-3R, TFE731-4, TFE731-4R, TFE731-5, TFE731-5AR, TFE731-5BR, and TFE731-5R
2010-06-12		Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99
Biweekly 2010-08			
2009-08-08 R1	R 2010-08-08	Turbomeca S.A	Engine: Arriel 1B, 1D, and 1D1, Arriel 2B and 2B1
2010-07-02	S 2006-22-05	Honeywell, Inc	Appliance: See AD
2010-07-07		Socata	TBM 700
2010-07-08		Kelly Aerospace Energy Systems, LLC	Appliance: See AD
2010-08-01		Aircraft Industries a.s	Glider: L 23 Super Blanik
Biweekly 2010-09			
2009-08-05R1	R	Liberty Aerospace Incorporated	XL-2
2010-08-04	2007-10-14	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200, Jetstream Series 3101, and Jetstream Model 3201
2010-09-08		General Electric Company	Engine: GE CJ610 series turbojet and CF700
Biweekly 2010-10			
2010-05-51	FR	Eurocopter France	Rotorcraft: EC120B
2010-09-01		Eurocopter France	Rotorcraft: AS350B, BA, B1, B2, B3, C, D and D1; and AS 355E, F, F1, F2, N, and NP
2010-09-02		British Aerospace Regional Aircraft	Jetstream Series 3101 and Jetstream Model 3201
2010-09-04		Honeywell International Inc	Appliance: Primus EPIC and Primus APEX flight management systems (FMS)
2010-09-09		Piaggio Aero Industries S.p.A.	P-180
2010-09-13		Turbomeca	Engine: Makila 2A
2010-10-01	S 2009-05-01	GA 8 Airvan (Pty) Ltd	Glider: GA8 and GA8-TC320
Biweekly 2010-11			
2010-10-02		Sikorsky Aircraft Corporation	Rotorcraft: S-76A, B, and C
2010-10-03		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2010-10-09	S 2008-07-01	Turbomeca	Engine: 1B (that incorporate Turbomeca Modification (mod) TU 148), Arriel 1D, 1D1, and 1S1
2010-10-10		Hawker Beechcraft	390
2010-10-14		Eurocopter France	Rotorcraft: AS332L2
2010-10-15		Eurocopter France	Rotorcraft: AS332L1 and AS332L2
2010-11-51	E	Eurocopter France	Rotorcraft: AS350B, BA, B1, B2, C, D, and D1 helicopters and Model AS355E, F, F1, F2, and N
2010-11-52	E	Sikorsky Aircraft	Rotorcraft: S-76A, B, and C

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Biweekly 2010-12			
2007-19-09 R1 2010-10-16	R	Turbomeca Bell Helicopter Textron and Agusta S.P.A.	Engine: ARRIEL 2B1 Rotorcraft: 205A, 205A-1, 205B, 212, 412, 412EP, and 412CF and Agusta S.p.A. Model AB412, AB412EP
2010-11-04 2010-11-05	S 2009-24-52	Teledyne Continental Motors AVOX Systems and B/E Aerospace	Engine: 240, 346, 360, 470, 520, and 550 and IO-240 See AD
2010-11-06	S 97-11-12	AeroSpace Technologies of Australia Pty Ltd	N22B, N22S, and N24A
2010-11-07 2010-11-08 2010-11-10 2010-11-15 2010-12-51	S 2008-11-20 E	Quartz Mountain Aerospace, Inc Stemme GmbH & Co. KG Turbomeca: Socata Agusta S.p.A.	11E S10-VT Engine: Astazou XIV B and XIV H TBM 700 Rotorcraft: A119 and AW119 MKII
Biweekly 2010-13			
2010-10-12 2010-10-16	S 2005-04-09	Bell Helicopter Textron Canada Bell Helicopter Textron and Agusta S.P.A	Rotorcraft: 222, 222B, 222U, 230, 430 Rotorcraft: 205A, 205A-1, 205B, 212, 412, 412EP, and 412CF and Agusta S.p.A. Model AB412, AB412EP
2010-11-09 2010-12-01 2010-12-02 2010-12-04 2010-13-01	S 2009-24-13	Thielert Aircraft Engines GmbH Cessna Aircraft Company Turbomeca S.A. PILATUS Aircraft Ltd Microturbo	Engine: TAE 125-01 and TAE 125-02-99 525A Engine: Makila 1A and 1A1 PC-7 Appliance: See AD
Biweekly 2010-14			
2010-13-07 2010-13-08 2010-13-10	S 2006-08-09	Piper Aircraft Air Tractor Ontic Engineering and Manufacturing, Inc	PA-32R-301T, PA046-350P AT-802 and AT-802A Appliance: See AD
Biweekly 2010-15			
2010-14-12		See AD	Rotorcraft: AH-1G, AH-1S, HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P Helicopters; and Southwest Florida Aviation Model UH-1B (SW204 and SW204HP) and UH-1H (SW205)
2010-14-15 2010-14-20 2010-14-21 2010-15-51	 E	Aircraft Industries a.s. McCauley Propeller Systems Thielert Aircraft Engines GmbH Agusta S.p.A.	Glider: L-13 Blanik Propeller: 4HFR34C653/L106FA Engine: TAE 125-01 A119 and AW119 MKII
Biweekly 2010-16			
2010-13-07 2010-15-04 2010-15-05 2010-15-07	COR S 2010-08-01	Piper Eurocopter France Aircraft Industries a.s Zakład Szybowcowy "Jeżów" Henryk Mynarski	PA-32R-301T, PA-46-350P Rotorcraft: EC225LP Glider: L 23 Super Blanik Sailplanes: PW-6U
2010-15-09 2010-15-10 2010-16-51	S 2009-23-11 E	Embraer Piper Eurocopter France	EMB-500 See AD Rotorcraft: SA330J
Biweekly 2010-17			
2010-15-03 2010-15-06 2010-16-08		Eurocopter France Grob-Werke GmbH Schweizer Aircraft Corp	Rotorcraft: EC 130 B4 Glider: G102 ASTIR CS and G102 STANDARD ASTIR III Rotorcraft: 269D

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Biweekly 2010-18

2010-11-51	FR	Eurocopter France	Rotorcraft: AS350B, BA, B1, B2, C, D, and D1 helicopters and Model AS355E, F, F1, F2, and N
2010-15-03		Eurocopter France	Rotorcraft: EC 130 B4
2010-15-06		GROB-WERKE GMBH & CO KG	Glider: G102 ASTIR CS and G102 STANDARD ASTIR III
2010-15-51		Agusta S.p.A	Rotorcraft: A119 and AW119 MKII
2010-16-08		Schweizer Aircraft Corporation	Rotorcraft: 269D
2010-17-06		Pratt & Whitney Canada Corp	Engine: PW615F
2010-17-08		Various Aircraft	See AD
2010-17-09		Pilatus Aircraft Ltd	PC-12/47E
2010-17-15		Hawker Beechcraft	390
2010-17-18	S 2010-13-08	Air Tractor	AT-802 and AT-802A
2010-18-02		Thielert Aircraft Engines GmbH	Engine: TAE 125-01, TAE 125-02-99
2010-18-05	S 2010-14-15	Aircraft Industries a.s.	Glider: L-13 Blanik
2010-18-06	S 2005-22-02	GA 8 AIRVAN (PTY)	GA8 and GA8-TC320
2010-18-51	E	MD HELICOPTERS, INC	Rotorcraft: MD900
2010-18-52	E, S 2010-18-51	MD Helicopters, Inc.	MD900

Biweekly 2010-19

2010-10-01 R1		GA 8 Airvan	GA8, GA8-TC320
2010-11-09	COR	Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99
2010-12-51	FR	Agusta S.p.A	Rotorcraft: A119 and AW119 MKII
2010-16-51	FR	Eurocopter France	Rotorcraft: SA330J
2010-18-12	COR	Robert E. Rust, Jr.	DeHavilland DH.C1 Chipmunk 21, DH.C1 Chipmunk 22, and DH.C1 Chipmunk 22A
2010-18-14		Bombardier-Rotax GmbH	Engine: 912 F series and 912 S
2010-19-51	E	Bell Helicopter Textron Canada	Rotorcraft: 222, 222B, 222U, 230, and 430

Biweekly 2010-20

2010-17-16		Sikorsky Aircraft Corporation	Rotorcraft: S-76A, S-76B, and S-76C
2010-18-12	COR	Robert E. Rust, Jr.	DeHavilland DH.C1 Chipmunk 21, DH.C1 Chipmunk 22, and DH.C1 Chipmunk 22A
2010-19-05		Eurocopter France	Rotorcraft: SA-365N1, AS-365N2, AS 365 N3, EC 155B, and EC155B1
2010-19-06		Turbomeca	Engine: Arriel 1A, 1A1, 1B, 1C, 1C1, 1C2, 1D, 1D1, and 1S1
2010-20-01		GROB-WERKE	G120A

Biweekly 2010-21

2009-09-03 R1	R 2009-09-03	Turbomeca S.A.	Engine: ARRIEL 2B and 2B1
2010-20-02		Eurocopter France	AS332C, L, L1, and L2
2010-20-05		Turbomeca S.A.	Engine: ARRIEL 2B
2010-20-06		Grob-Werke	G115C, G115D, and G115D2
2010-20-18		Pacific Aerospace Limited	FU24-954 and FU24A-954
2010-20-20		Eurocopter France	EC 155B, EC155B1, SA-360C, SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1
2010-20-21		Agusta S.p.A.	A109E
2010-20-23		Bombardier-Rotax GmbH	Engine: 912 F series, 912 S series, and 914 F series
2010-20-24		Eclipse Aerospace	EA500

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Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
Biweekly 2010-22			
2010-20-21	COR	Agusta S.p.A.	Rotorcraft: A109E
2010-21-01		Eurocopter France	Rotorcraft: AS350B, BA, B1, B2, B3, D, AS355E, F, F1, F2, and N
2010-21-07		Eurocopter France	Rotorcraft: AS350B3 and EC130 B4
2010-21-08		Piaggio Aero Industries S.p.A.	P-180
2010-21-09		Piaggio Aero Industries S.p.A.	P-180
2010-21-14		Piaggio Aero Industries S.p.A.	P-180
2010-21-18		Cessna Aircraft Company	336, 337, 337A (USAF 02B), 337B, M337B (USAF 02A), T337B, 337C, T337C, 337D, T337D, 337E, T337E, 337F, T337F, 337G, T337G, 337H, P337H, T337H, T337H-SP, F 337E, FT337E, F 337F, FT337F, F 337G, FT337GP, F337H, and FT337HP
2010-22-08		Eurocopter France	Rotorcraft: AS 350 B, BA, B1, B2, B3, and D; AS355 E, F, F1, F2, and N
Biweekly 2010-23			
2010-22-07	S 2006-26-51	Eurocopter Deutschland	Rotorcraft: MBB-BK 117 C-2
2010-22-09		Pilatus Aircraft	PC-7
2010-23-01		Piaggio Aero Industries	P-180
2010-23-02		Eurocopter France	Rotorcraft: SA-365N, SA-365N1, AS-365N2, and AS 365 N3
2010-23-09		Austro Engine	Engine: E4 diesel piston
Biweekly 2010-24			
96-18-05 R1		Bell Helicopter Textron Canada	Rotorcraft: 206L, 206L-1, and 206L-3
2008-26-10	COR	Cessna	See AD
2010-18-52		MD Helicopters	Rotorcraft: MD900
2010-23-16		EMBRAER	EMB-500
2010-23-17		See AD	See AD
2010-23-22		Eurocopter France	Rotorcraft: AS332L2
2010-23-23		Eurocopter France	Rotorcraft: SA330F, G, J, and AS332C, L, L1, and L2
2010-23-24		Sikorsky	Rotorcraft: S-70A and S-70C
2010-24-04	S 2009-23-51	Sikorsky	Rotorcraft: S-92A
2010-24-51	E	Bell Helicopter Textron, Inc.	Rotorcraft: 212
2010-24-52	E, S 2010-24-51	Bell Helicopter Textron, Inc.	Rotorcraft: 212
Biweekly 2010-25			
2010-10-17	COR, S 97-25-02, 2000-02-25, 2006-15-07, 2006-17-01	Mitsubishi Heavy Industries	MU-2B-25, MU-2B-26, MU-2B-26A, MU-2B-36A, MU-2B-40, MU-2B-60, MU-2B-35, MU-2B-36, MU-2B, MU-2B-10, MU-2B-15, MU-2B-20, MU-2B-25, MU-2B-26, MU-2B-30, MU-2B-35, MU-2B-36
2010-19-51		Bell Helicopter Textron Canada	Rotorcraft: 222, 222B, 222U, 230, and 430
2010-23-28	S 2009-23-12	SOCATA	TBM 700
2010-24-03		Robinson Helicopter	Rotorcraft: R22, R22 Alpha, R22 Beta, R22 Mariner, R44, and R44 II
2010-24-05		Pratt & Whitney Canada	Engine: PW305A and PW305B turboprop
2010-24-10		Centrair	Glider: 101, 101A, 101P, and 101AP
2010-25-51	E, S 2010-24-52	Bell Helicopter Textron, Inc.	Rotorcraft: 212



CORRECTION: [*Federal Register: November 23, 2010 (Volume 75, Number 225)*]; Page 71353;
www.access.gpo.gov/su_docs/aces/aces140.html]

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

Effective Date

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

Affected ADs

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

Applicability

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

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

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

Table 2–MHI Airplanes Listed in TCDS A2PC

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

Unsafe Condition

(d) This AD results from inconsistencies in critical operating procedures between the MU-2B specific training, the FAA-accepted pilot operating checklists, and the airplane flight manuals (AFM). MHI revised the AFMs to align them with the information in that training and the checklists. We are issuing this AD to correct inconsistencies in critical operating procedures between the MU-2B

specific training, the FAA-accepted pilot operating checklists, and the AFMs, which, if not corrected, could result in pilots inadvertently taking inappropriate actions in critical operating conditions.

Compliance

(e) Do the following unless already done:

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

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

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

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

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

A10SW	MU-2B-25	AFM, Section 6, Reissued March 25, 1986	6-18 and 6-19
	MU-2B-26	AFM, Section 6, Reissued March 25, 1986	6-17 and 6-18
	MU-2B-26A	AFM, Section 6, Reissued March 25, 1986	6-17 and 6-18
	MU-2B-36A	AFM, Section 6, Reissued February 28, 1986	6-20 and 6-21
	MU-2B-40	AFM, Section 6, Reissued March 25, 1986	6-17 and 6-18
	MU-2B-60	AFM, Section 6, Reissued September 24, 1985	6-19 and 6-20

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

Table 4—TCDS A10SW

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

Table 5–TCDS A2PC

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

Alternative Methods of Compliance (AMOCs)

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

Material Incorporated by Reference

(g) You must use Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 233A, dated January 14, 1999; Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 095/77-002, dated July 15, 1998; Mitsubishi Heavy Industries, Ltd. MU-2 Service Bulletin No. 233B, dated March 8,

2007; and the AFMs specified in Table 6 of this AD to do the actions required by this AD, unless the AD specifies otherwise. The AFMs and Pilot's Operating Manuals (POMs) are bound together in one book for each airplane model; however, only the AFMs are required to comply with this AD. The POMs are not approved data and are not incorporated by reference; the POMs are not required to comply with this AD.

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

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

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

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

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

Table 6—Material Incorporated by Reference

AFM Name	Effective Pages List
MU-2B-25 Airplane Flight Manual K Model, Document Number MR-0156-1	all revised pages up to and including revision 11, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26 Airplane Flight Manual M Model, Document Number MR-0160-1	all revised pages up to and including revision 11, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-26A Airplane Flight Manual P Model, Document Number MR-0194-1	all revised pages up to and including revision 13, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-36A Airplane Flight Manual N Model, Document Number MR-0196-1	all revised pages up to and including revision 15, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-40 Airplane Flight Manual SOLITAIRE Model, Document Number MR-0271-1	all revised pages up to and including revision 13, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B-60 Airplane Flight Manual MARQUISE Model, Document Number MR-0273-1	all revised pages up to and including revision 15, dated March 10, 2009, as listed on page 1 and page 2 of the "Effective Pages" in the AFM
MU-2B Airplane Flight Manual, YET 67026A	all revised pages up to and including revision 13, dated November 29, 2007, as listed on page 1 and page 2 of the "Effective Pages" in the AFM

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

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

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



2010-19-51 Bell Helicopter Textron Canada: Amendment 39-16523. Docket No. FAA-2010-1137; Directorate Identifier 2010-SW-079-AD.

Applicability: Model 222, 222B, 222U, 230, and 430 helicopters, with an installed main rotor hydraulic servo actuator, part number 222-382-001-107 (servo actuator), manufactured by Woodward HRT, certificated in any category.

Compliance: Before further flight, unless accomplished previously. To detect corrosion or a nonconforming grind relief on the output piston rod assembly (piston rod), to prevent failure of the piston rod, failure of the servo actuator, and subsequent loss of control of the helicopter, do the following:

(a) Disassemble the actuator to gain access to the piston rod as shown in Figures 1 through 5 and by following the Accomplishment Instructions, paragraph 3.A., Part I., of Woodward HRT Alert Service Bulletin No. 141600-67-02, dated August 18, 2010 (Woodward ASB).

Note 1: Bell Helicopter Textron Canada (Bell) Alert Service Bulletin (ASB) No. 222-10-109 for the Models 222 and 222B, ASB No. 222U-10-80 for the Model 222U, ASB No. 230-10-41 for the Model 230, and ASB No. 430-10-44 for the Model 430 helicopters, all ASBs dated August 18, 2010, which are not incorporated by reference, contain additional information about the subject of this AD.

(b) Clean the entire piston rod and nut using Acetone and a nylon bristle brush removing all contaminants to allow for inspection. Inspect the grind relief configuration for the piston rod and nut as shown in Figure 6 of the Woodward ASB. If the grind relief is unacceptable as shown in Figure 6, replace the piston rod and the nut with airworthy parts.

(c) Using a 10x or higher magnifying glass, visually inspect the nut for any corrosion or any damage to the threads. If you find any corrosion or any damage to the threads, replace the nut with an airworthy nut.

(d) Using a 10x or higher magnifying glass, visually inspect the piston rod as shown in Figure 7 of the Woodward ASB for any corrosion, visible lack of cadmium plate (gold or grey color), or damage to the piston rod.

Note 2: For the purposes of this AD, damage to the piston rod is defined as pitting, a visible scratch, a crack, or a visible abrasion.

(1) If you find any corrosion or visible lack of cadmium plate or any damage to the piston rod in the "Critical Areas," replace the piston rod with an airworthy piston rod.

(2) If you find any corrosion or visible lack of cadmium plate on the piston rod in areas that are not considered "Critical Areas," rework the piston rod by removing any surface corrosion that has not penetrated into the base material by lightly buffing with scotch-brite. Clean the part using Acetone and a nylon bristle brush to remove any residue.

(3) If you find any corrosion that is red or orange in color, magnetic particle inspect the piston rod for a crack. If you find a crack, replace the piston rod with an airworthy piston rod.

(e) Inspect the portion of the piston rod for any bare base metal, as shown in Figure 7 of the Woodward ASB, which is coated with cadmium plate. If you find any bare base metal on the piston rod in this area, rework the piston rod by applying brush cadmium plating to all bare and reworked areas by following the Accomplishment Instructions, paragraph B., Part II, 4.5. and paragraph C., Part III, C.1.1.1. through C.1.1.3., of the Woodward ASB, except we are not adopting the life limit for the piston rod assembly as stated in paragraph B, Part II, 4.5.

(f) Reassemble the servo actuator by following the Accomplishment Instructions, paragraph C, Part III, 1.1.4. through 3.3.4. of the Woodward ASB.

(g) After reassembling the servo actuator, mark it with the letter "B" following the serial number on the name plate using a scribe or vibrating stylus.

(h) Perform a hydraulic system check.

(i) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Safety Management Group, FAA, ATTN: J. R. Holton, Jr., Aviation Safety Engineer, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-4964, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(j) The Joint Aircraft System/Component (JASC) Code is 6730: Rotorcraft Servo System.

(k) The actions shall be done in accordance with the specified portions of Woodward HRT Alert Service Bulletin No. 141600-67-02, dated August 18, 2010. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bell Helicopter Textron Canada, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4, telephone (450) 437-2862 or (800) 363-8023, fax (450) 433-0272, or at <http://www.bellcustomer.com/files/>. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html. (l) This amendment becomes effective on December 9, 2010, to all persons except those persons to whom it was made immediately effective by Emergency AD 2010-19-51, issued August 31, 2010, which contained the requirements of this amendment.

Note 3: The subject of this AD is addressed in Transport Canada AD No. CF-2010-29, dated August 26, 2010.

Issued in Fort Worth, Texas, on November 9, 2010.
Kim Smith,
Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-23-28 SOCATA: Amendment 39-16518; Docket No. FAA-2010-0862; Directorate Identifier 2010-CE-040-AD.

Effective Date

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

Affected ADs

- (b) This AD supersedes AD 2009-23-12, Amendment 39-16086.

Applicability

- (c) This AD applies to SOCATA Model TBM 700 airplanes, serial numbers 1 through 204, 206 through 239, and 241 through 243, that are:
 - (i) certificated in any category; and
 - (ii) equipped with a chemical oxygen generation system.

Subject

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

Reason

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

During a SOCATA flight test, it was noted some difficulties for the pilot to release oxygen. After investigation it was found that, due to the design of the oxygen generator release pin, one of the mask's lanyard linked to the pin could be jammed when it is pulled by a pilot or a passenger.

This condition, if not corrected, would lead, in case of an emergency procedure due to decompression, to a risk of generator fault with subsequent lack of oxygen on crew and/or passenger.

For the reason described above, SOCATA released Pilot Operating Handbook (POH) Temporary Revision (TR) 03 which asks, in case of failure to release oxygen, to pull on the other mask lanyard in order to activate the oxygen generator. The Emergency AD 2009-0096-E was issued to mandate the follow-up of these actions by the operators in case of failure. This EAD was subsequently revised into AD 2009-0096R1 in order to clarify the applicability.

A SOCATA modification enabling to solve this issue has been developed. Consequently, this new AD, superseding EASA AD 2009-0096R1 retaining its requirements, requires implementing the modification which is a terminating action.

Actions and Compliance

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

(1) Before further flight after December 29, 2010 (the effective date of this AD), insert Temporary Revision No. 3, dated March 2009, into the Emergency Procedures section and the Limitations section of DAHER-SOCATA TBM 700 A & B Pilot's Operating Handbook (POH).

(2) Within 7 months after December 29, 2010 (the effective date of this AD) or 100 hours time-in-service (TIS) after December 29, 2010 (the effective date of this AD), whichever occurs first, replace the existing oxygen generator release pin, part number (P/N) T700A3510038100, with an open pin, P/N T700A351004410000, using the accomplishment instructions of DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-168, dated December 2009.

(3) After December 29, 2010 (the effective date of this AD), do not install in any affected airplane an oxygen generator release pin, P/N T700A3510038100.

FAA AD Differences

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

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Albert Mercado, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4119; fax: (816) 329-4090. Before using any approved AMOC on any airplane to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

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

(3) Reporting Requirements: For any reporting requirement in this AD, 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

(h) Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2010-0090, dated May 18, 2010; DAHER-SOCATA TBM 700 A & B Pilot's Operating Handbook (POH), Temporary Revision No. 3, dated March 2009; and DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-168, dated December 2009, for related information.

Material Incorporated by Reference

(i) You must use DAHER-SOCATA TBM 700 A & B Pilot's Operating Handbook (POH), Temporary Revision No. 3, dated March 2009; and DAHER-SOCATA TBM Aircraft Mandatory Service Bulletin SB 70-168, dated December 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 SOCATA—Direction des services, 65921 Tarbes Cedex 9, France; telephone: 33 (0) 62 41 73 00; fax: + 33 (0) 62 41 76 54; or for the U.S.A.: SOCATA NORTH AMERICA, North Perry Airport, 7501 South Airport Rd., Pembroke Pines, Florida 33023; telephone: 1 (954) 893 1400; fax: 1 (954) 964 4141; Internet: <http://mysocata.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 incorporated by reference for this AD at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call (202) 741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

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

James E. Jackson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



2010-24-03 Robinson Helicopter Company: Amendment 39-16521; Docket No. FAA-2010-0711; Directorate Identifier 2008-SW-25-AD.

Applicability: Model R22, R22 Alpha, R22 Beta, and R22 Mariner helicopters, serial numbers (S/N) 0002 through 3325, that have more than 2,200 hours total time-in-service (TIS); and Model R44, and R44 II helicopters, S/N 0001 through 1200, that have more than 2,200 hours total TIS, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To prevent the tail rotor (T/R) control pedal bearing block support (support) from breaking, which can bind the T/R control pedals, resulting in a reduction of yaw control and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 100 hours TIS, visually inspect each A359-1 (left) and A359-2 (right) pedal support for a crack by referring to the figure in Robinson Helicopter Company (Robinson) Service Bulletin SB-97, dated February 22, 2008 (SB-97) for all Model R22 helicopters, and Robinson Service Bulletin SB-63, dated February 22, 2008 (SB-63) for all Model R44 helicopters.

(1) If you find a crack in a support, before further flight, replace the cracked support with an airworthy support that is at least 0.050-inch thick.

(2) For each uncracked support, measure the thickness of the support. If the support is less than 0.050-inch thick, before further flight, install a safety tab on the support in accordance with steps 4 and 5 of the Compliance Procedures section in SB-97 or SB-63, as appropriate for your model helicopter.

(b) At the next 2,200 hours TIS overhaul, replace any support that is less than 0.050-inch thick, with an airworthy support that is at least 0.050-inch thick.

(c) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Los Angeles Aircraft Certification Office, FAA, ATTN: Eric D. Schrieber, Aviation Safety Engineer, 3960 Paramount Blvd., Lakewood, California 90712, telephone (562) 627-5348, fax (562) 627-5210 (regarding Model R22 helicopters); or ATTN: Fred Guerin, Aviation Safety Engineer, telephone (562) 627-5232, fax (562) 627-5210 (regarding Model R44 helicopters) for information about previously approved alternative methods of compliance.

(d) The Joint Aircraft System/Component (JASC) Code is 6720: Tail Rotor Control System.

(e) The inspection and modification shall be done in accordance with the specified portions of Robinson Helicopter Company Service Bulletin SB-97 or SB-63, both dated February 22, 2008. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Robinson Helicopter Company, 2901 Airport Drive, Torrance, California 90505, telephone (310) 539-0508, fax (310) 539-5198. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas or at the National Archives and Records Administration

(NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html.

(f) This amendment becomes effective on December 29, 2010.

Issued in Fort Worth, Texas, on November 10, 2010.

Kim Smith,
Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-24-05 Pratt & Whitney Canada Corp. (Formerly Pratt & Whitney Canada, Inc.):
Amendment 39-16524. Docket No. FAA-2010-0829; Directorate Identifier 2010-NE-23-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective January 3, 2011.

Affected ADs

(b) None.

Applicability

(c) This AD applies to Pratt & Whitney Canada Corp. (P&WC) PW305A and PW305B turboprop engines with certain impellers, part numbers (P/Ns) 30B2185, 30B2486, 30B2858-01, or 30B4565-01 installed. These engines are installed on, but not limited to, Hawker-Beech Corporation BAe.125 series 1000A, 1000B, and Hawker 1000 airplanes and Learjet Inc. Learjet 60 airplanes.

Reason

(d) This AD results from:

As a result of a change in the low-cycle fatigue lifing methodology for the IMI 834 material, the recommended service life of certain PW305A and PW305B Impellers has been reduced, as published in the Airworthiness Limitations (AWL) section of Engine Maintenance Manual (EMM).

The in-service life of impellers P/N 30B2185, 30B2486 and 30B2858-01 has been reduced from 12,000 to 7,000 cycles; and of P/N 30B4565-01 from 8,500 to 7,000 cycles.

We are issuing this AD to prevent failure of the impeller, which could result in an uncontained event and possible damage to the airplane.

Actions and Compliance

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

(f) Within 30 days from the effective date of this AD, update AWL section of your PW305 EMM P/N 30B1402, to incorporate Pratt & Whitney Canada Corp. Temporary Revision (TR) AL-8, dated January 20, 2010, for compliance with the revised in-service limits for the affected Impellers, installed on PW305A and PW305B engine.

FAA AD Differences

(g) None.

Other FAA AD Provisions

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

Alternative Methods of Compliance (AMOCs)

(i) 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

(j) Refer to MCAI Transport Canada Airworthiness Directive CF-2010-09, dated March 17, 2010, for related information.

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

Material Incorporated by Reference

(l) You must use Pratt & Whitney Canada Corp. Temporary Revision No. AL-8, dated January 20, 2010, to P&WC EMM P/N 30B1402 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 Pratt & Whitney Canada Corp., 1000 Marie-Victorin, Longueuil, Quebec, Canada J4G 1A1; telephone (800) 268-8000; fax (450) 647-2888; or go to: <http://www.pwc.ca>.

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

Issued in Burlington, Massachusetts, on November 10, 2010.

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



2010-24-10 CENTRAIR: Amendment 39-16529; Docket No. FAA-2010-0735; Directorate Identifier 2010-CE-030-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective January 5, 2011.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to CENTRAIR Models 101, 101A, 101P, and 101AP gliders, all serial numbers, certificated in any category.

Subject

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

Reason

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

Damages to the rudder bar locking adjustment tube of a non-reinforced version have been reported to Société Nouvelle (SN) Centrair. This tube had been reinforced in 1984 with a modification. Gliders produced before the introduction of this modification have not been systematically retrofitted.

In case of rudder bar locking adjustment tube breaking in flight when adjusting the rudder pedals position, it might interfere with the rudder pedals which could lead to rudder jam or a restricted rudder movement and consequently, to reduced control of the sailplane.

For the reason described above, this AD requires inspecting the rudder bar locking adjustment tube and, if necessary, replacing it.

Actions and Compliance

- (f) Unless already done, do the following actions in accordance with Société Nouvelle Centrair Service Bulletin No. 101-29, dated July 30, 2009:

- (1) Within the next 30 days after January 5, 2011 (the effective date of this AD), inspect the rudder bar locking adjustment tube to determine if it has been reinforced and to determine if it has been damaged.

(2) If the results of the inspection required in paragraph (f)(1) of this AD show that the rudder bar locking adjustment tube has not been reinforced and is not damaged, replace it with a reinforced rudder bar locking adjustment tube, part number (P/N) \$Y186A, at the next scheduled maintenance event after January 5, 2011 (the effective date of this AD) but no later than 12 months after January 5, 2011 (the effective date of this AD).

(3) If the results of the inspection required in paragraph (f)(1) of this AD show that the rudder bar locking adjustment tube has not been reinforced but is damaged, replace it with a reinforced rudder bar locking adjustment tube, P/N \$Y186A, before further flight.

FAA AD Differences

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

Other FAA AD Provisions

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

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Greg Davison, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4130; fax: (816) 329-4090. Before using any approved AMOC on any glider to which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

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

(3) Reporting Requirements: For any reporting requirement in this AD, 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

(h) Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2010-0099, dated May 26, 2010; and Société Nouvelle Centrair Service Bulletin No. 101-29, dated July 30, 2009, for related information.

Material Incorporated by Reference

(i) You must use Société Nouvelle Centrair Service Bulletin No. 101-29, dated July 30, 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 Société Nouvelle CENTRAIR, Aerodome-36300 Le Blanc, France; telephone: +33 (0)254 370796; fax: +33 (0)54. 374864; Internet: <http://www.societe.com>.

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

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

Issued in Kansas City, Missouri, on November 17, 2010.

Patrick R. Mullen,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



DATE: November 24, 2010
AD #: 2010-25-51

Background

This EAD supersedes EAD 2010-24-52, issued November 19, 2010, and is prompted by the need to require performing a magnetic particle inspection (MPI) on additional serial-numbered main rotor hub inboard strap fittings.

On November 12, 2010, we issued EAD 2010-24-51 for all Bell Model 212 helicopters with a main rotor hub inboard strap fitting (fitting), part number (P/N) 212-010-103-007, serial number (S/N) 9956 through 10005 with a prefix of "A." That EAD required, before further flight, removing any affected fitting and replacing it with an airworthy fitting. That EAD also prohibited installing any affected fitting on any helicopter. EAD 2010-24-51 was prompted by an accident that resulted in several fatalities. During the investigation of the accident, a crack was found on the fitting. Subsequently, four additional fittings from the same manufacturing lot were inspected and two were found to exhibit the same type of cracking. We issued EAD 2010-24-51 to prevent a cracked fitting, which could result in failure of the fitting, loss of a main rotor blade, and subsequent loss of control of the helicopter.

After we issued EAD 2010-24-51, additional fittings from a different manufacturing lot were found to have the same type of crack as that found on the fitting involved in the accident. Therefore, on November 19, 2010, we issued superseding EAD 2010-24-52 to require the same actions as EAD 2010-24-51 but to expand the applicability to include additional fittings, S/N 9956 through 10005, with a prefix of "A" and S/N 52, 54, 55, 57 through 65, 67, 69, 70, 71, 73, 103, 112, 113, 137, and 139, with a prefix of "SH."

EADs 2010-24-51 and 2010-24-52 were issued as interim actions to address a known unsafe condition. Bell is continuing to investigate the cause of the cracking. Because the root cause of the cracking has not been determined and due to the severity of a fitting failure, we are superseding EAD 2010-24-52 to continue to require replacing certain serial-numbered fittings and to require performing an MPI on other serial-numbered fittings. We have determined that the MPI is necessary to detect a crack on those fittings not already removed from service.

Relevant Service Information

We reviewed Bell Alert Service Bulletin No. 212-10-141, Revision A, dated November 18, 2010 (ASB 212-10-141), which incorporates additional serial numbers (S/Ns) of the affected fittings, and specifies the immediate removal of these subject serial-numbered fittings from service. Bell states they have determined that the fitting may not have been manufactured in accordance with the engineering design requirements and may fracture as a result of the non-conformance. Bell further states that their investigation is ongoing, and indicates that the ASB affects the fitting, P/N 212-010-103-007, S/Ns as listed in Table 1:

Table 1 - S/Ns in ASB 212-10-141
A-9956 through A-10005
SH-52, SH-54, SH-55
SH-57 through SH-65
SH-67, SH-69, SH-70, SH-71, SH-73
SH-103, SH-112, SH-113, SH-137, SH-139

We have also reviewed Bell Alert Service Bulletin No. 212-10-142, dated November 24, 2010 (ASB 212-10-142), which specifies within the next 15 flight hours after release of the ASB, but no later than January 15, 2011, performing a one time MPI of the fitting, P/N 212-010-103-007, S/Ns as listed in Table 2:

Table 2 – S/Ns in ASB 212-10-142
A-009911 through A-009955
A-010006 thru A-010049
A-010075 thru A-010174
A-010455 thru A-010460
A-010581 thru A-010655
A-010742 thru A-010791
A-010862 thru A-010946

Bell states in ASB 212-10-142 that they have determined that fittings may not have been manufactured in accordance with the engineering design requirements and may fracture as a result of a non-conformance. They also state that a possibility exists that undetected cracks during the quenching operation could have occurred at manufacture.

FAA’s Determination

We are issuing this EAD because we evaluated all the available information and determined the unsafe condition described is likely to exist or develop in other products of this same type design. Bell is still investigating the cause of these failures and we may issue additional rulemaking to correct this unsafe condition.

AD Requirements

This EAD supersedes AD 2010-24-52 and requires the following:

- Before further flight, for any helicopter with a fitting, S/N 9956 through 10005, with a prefix of “A”; and S/N 52, 54, 55, 57 through 65, 67, 69, 70, 71, 73, 103, 112, 113, 137, and 139, with a prefix of “SH”, replace the fitting with an airworthy fitting. Any fitting with a S/N identified in this paragraph of this EAD is no longer eligible for installation on any helicopter.

- Before further flight, for any helicopter with a fitting, S/N 9911 through 9955, 10006 through 10049, 10075 through 10174, 10455 through 10460, 10581 through 10655, 10742 through 10791, and 10863 through 10946, with a prefix of “A”, perform a magnetic particle inspection (MPI) of each fitting for a crack. If the fitting is cracked, replace it with an airworthy fitting. If the fitting is not cracked, reidentify the fitting in accordance with the specified portion of ASB 212-10-142. Also, within 24 hours after finding any fitting with a crack doing any magnetic particle inspection, report the information requested in Appendix 1 of this AD to the Manager, Rotorcraft Certification Office.

Differences Between This EAD and the Service Information

This EAD differs from the ASBs in that we do not require returning parts to Bell. Also, this EAD differs from ASB 212-10-142 in that we:

- Require performing an MPI before further flight. However, we do allow the operator to request a special flight permit to perform the MPI.
- Do not require an entry stating that the ASB has been carried out and no defects were found.
- Require sending information to the Rotorcraft Certification Office and not to Bell.

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.

Pursuant to this Authority delegated to me by the Administrator, we are hereby issuing this Emergency Airworthiness Directive (EAD).

2010-25-51 BELL HELICOPTER TEXTRON, INC.: Directorate Identifier 2010-SW-096-AD.

Effective Date

- (a) This EAD is effective upon receipt.

Other Affected ADs

- (b) This EAD supersedes EAD 2010-24-52, issued November 19, 2010.

Applicability

(c) This EAD applies to Bell Helicopter Textron, Inc. Model 212 helicopters certificated in any category, with a main rotor hub inboard strap fitting (fitting), as follows:

Part Number (P/N)	With
212-010-103-007	The following Serial Number (S/N) with a prefix of “A”: 9911 through 9955, 9956 through 10005, 10006 through 10049, 10075 through 10174, 10455 through 10460, 10581 through 10655, 10742 through 10791, and 10862 through 10946
	The following S/N with a prefix of “SH”: 52, 54, 55, 57 through 65, 67, 69, 70, 71, 73, 103, 112, 113, 137, and 139

Unsafe Condition

(d) This superseding EAD is prompted by a recent accident that resulted in several fatalities. Because the root cause of the cracking has not yet been determined and due to the severity of a fitting failure, we are superseding EAD 2010-24-52 to require replacing certain serial-numbered fittings and performing a magnetic particle inspection (MPI) of other serial-numbered fittings for a crack. The actions specified by this EAD are intended to prevent failure of a fitting, loss of a main rotor blade, and subsequent loss of control of the helicopter.

Compliance

(e) Required as indicated, unless accomplished previously.

(f) Before further flight, for any helicopter with a fitting, S/N 9956 through 10005, with a prefix of “A”; and S/N 52, 54, 55, 57 through 65, 67, 69, 70, 71, 73, 103, 112, 113, 137, and 139, with a prefix of “SH”, replace the fitting with an airworthy fitting. Any fitting with a S/N identified in this paragraph of this EAD is no longer eligible for installation on any helicopter.

(g) Before further flight, for any helicopter with a fitting, S/N 9911 through 9955, 10006 through 10049, 10075 through 10174, 10455 through 10460, 10581 through 10655, 10742 through 10791, and 10862 through 10946, with a prefix of “A”, perform a magnetic particle inspection (MPI) of each fitting for a crack.

Note 1: The Bell Model 212 Component, Repair, and Overhaul Manual (BHT-212-CR&O), which is not incorporated by reference, contains additional information about MPI procedures.

(1) If the fitting is cracked, replace it with an airworthy fitting.

(2) If the fitting is not cracked, reidentify and refinish the fitting in accordance with paragraph 5. of Bell Helicopter Alert Service Bulletin No. 212-10-142, dated November 24, 2010 (ASB 212-10-142), except this EAD does not require that you make an entry stating that the ASB has been carried out and no defects were found.

Note 2: A picture of a crack indication on an actual fitting is shown in Figure 1 of ASB 212-10-142.

(3) Within 24 hours after finding any cracked fitting as a result of performing an MPI, report the information requested in Appendix 1 of this AD to the Manager, Rotorcraft Certification Office, to the address or fax number specified in the Appendix. 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 EAD and has assigned OMB Control Number 2120-0056.

Special Flight Permit

(h) A special flight permit may be issued for a one-time ferry flight to a maintenance base facility to perform the requirements of this AD.

Paperwork Reduction Act Burden Statement]

(i) 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.

Alternative Methods of Compliance (AMOCs)

(j) The Manager, Rotorcraft Certification Office, FAA, has the authority to approve AMOCs for this EAD, 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 Rotorcraft Certification Office, send it to the attention of the person identified in the Other Information section of this EAD.

Note 3: Before using any approved AMOC, we request that you notify your appropriate principal inspector, or lacking a principal inspector, your local Flight Standards District Office.

Other Information

(k)(1) For further information about this EAD, contact: Michael Kohner, Aerospace Engineer, FAA, Rotorcraft Directorate, Rotorcraft Certification Office, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5170, fax (817) 222-5783; e-mail: mike.kohner@faa.gov.

(2) Bell Helicopter Alert Service Bulletin No. No. 212-10-141, Revision A, dated November 18, 2010, which is not incorporated by reference, contains additional information about the subject of this EAD.

Appendix 1 to EAD 2010-25-51

AD Compliance Inspection Report (Sample Format)

Provide the following information and mail, fax, or e-mail report to: Manager, Rotorcraft Certification Office, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137, fax (817) 222-5783, e-mail mike.kohner@faa.gov.

Aircraft Registration No.	
Helicopter Serial No.	
Helicopter Owner/Operator	
Contact Phone No.	
Fitting Part Number	
Fitting Serial Number	
Total Hours Time-in-Service on Fitting at Time of Inspection	
Description of Findings	
Who Performed the Inspection?	
Date and Location the Inspection was Performed	
Describe the crack size, location, orientation (provide a sketch or pictures with the fitting part and serial numbers).	
Provide any other comments.	

Subject

(l) The Joint Aircraft System Component Code is: 6220 Main Rotor Hub.

Issued in Fort Worth, Texas, on November 24, 2010.

Lance T. Gant,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.