

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

**SMALL AIRPLANES, ROTORCRAFT, GLIDERS,  
BALLOONS, & AIRSHIPS**

**BIWEEKLY 2013-22**

*10/21/2013 - 11/3/2013*



Federal Aviation Administration  
Engineering Procedures Office, AIR-110  
P.O. Box 25082  
Oklahoma City, OK 73125-0460

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**SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

AD No.	Information	Manufacturer	Applicability
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Information Key: E - Emergency; COR - Correction; S – Supersedes

**Biweekly 2013-01**

2012-26-07		Eurocopter France	AS350BA helicopters
2012-26-09		Burkhart GROB Luft-und Raumfahrt GmbH	GROB G 109 and GROB G 109B sailplanes
2012-26-10		Eurocopter France	SA-365N, SA-365N1, AS-365N2, AS 365 N3, EC 155B, EC155B1, SA-366G1, SA-365C, SA-365C1, and SA-365C2 helicopters
2012-26-11		Bell Helicopter Textron Inc	205A, 205A-1, and 205B helicopters
2012-26-12		Thielert Aircraft Engines	TAE 125-02-99 and TAE 125-02-114 reciprocating engines
2012-26-13	S 2011-07-09	Thielert Aircraft Engines GmbH	TAE 125-01, TAE 125-02-99, and TAE 125-02-114 reciprocating engines
2012-26-15		Honeywell International Inc	See AD
2012-27-02		Turbomeca S.A.	ARRIEL 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines

**Biweekly 2013-02**

2012-17-08		Bell Helicopter Textron Inc	204B, 205A, 205A-1, 205B, and 212 helicopters
2012-24-09	COR	Lycoming Engines and Continental Motors, Inc.	TIO-540-AK1A, TSIO-360-MB, TSIO-360-SB, and TSIO-360-RB reciprocating engines
2013-01-06		Pilatus Aircraft Ltd	PC-7
2013-02-01		Bell Helicopter Textron Inc	206L, 206L-1, and 206L-3 helicopters, and Model 206L-4 helicopters

**Biweekly 2013-03**

2013-01-04		Bell Helicopter Textron, Inc	412 and 412EP helicopters
2013-01-05		Eurocopter France	AS350B3 and EC130B4 helicopters
2013-01-07		Turbomeca S.A.	Arriel 2D turboshaft engines
2013-02-13		Piper Aircraft, Inc	PA-28-236, PA-28-140, PA-28-150, PA-28-151, PA-28-160, PA-28-161, PA-28-180, PA-28-181, PA-28-201T, PA-28R-201, PA-28-235, PA-28R-201T, PA-28S-160, PA-28S-180, PA-28R-180, PA-28R-200, PA-28RT-201, PA-28RT-201T, PA-32-260, PA-32-301, PA-32-301T, PA-32-300, PA-32R-300, PA-32R-301T, PA-32R-301 (SP), PA-32R-301 (HP), PA-32RT-300, PA-32RT-300T, PA-32S-300, PA-32-301FT, PA-32-301XTC, PA-34-200, PA-34-200T, PA-34-220T, PA-44-180, and PA-44-180T
2013-03-03		MD Helicopters, Inc.	500N, 600N, and MD900 helicopters

**Biweekly 2013-04**

2012-26-16	S 2009-14-13	Pilatus Aircraft Ltd.	PC-12, PC-12/45, PC-12/47, and PC-12/47E
2013-03-01	S 2010-20-18	Pacific Aerospace Limited	FU24-954 and FU24A-954
2013-03-02	S 2012-19-09	Eurocopter France	EC 155B, EC155B1, SA-365N1, AS-365N2 AS 365 N, and AS 365 N3 helicopters
2013-03-04		Sikorsky Aircraft Corporation	269D and Model 269D
2013-03-09		DG Flugzeugbau GmbH	DG-1000T gliders
2013-03-10		Lindstrand Hot Air Balloons Ltd	Appliance: Female ACME threaded hose connectors
2013-03-14		Pratt & Whitney Canada Corp.	PT6C-67C turboshaft engines
2013-03-15		Cessna Aircraft Company	172R and 172S
2013-03-16	S 2011-08-01	Bell Helicopter Textron	204B, 205A, 205A-1, 205B, 210 and 212 helicopters
2013-03-21		Pratt & Whitney Canada Corp.	PW206B, PW206B2, PW206C, PW207C, PW207D, PW207D1, PW207D2, and PW207E turboshaft engines
2013-04-02		Reims Aviation S.A.	F406

**Biweekly 2013-05**

2013-04-06		Eurocopter France	AS332C, AS332L, and AS332L1 helicopters
2013-04-08		Diamond Aircraft Industries GmbH	H-36, HK 36 R, HK 36 TS, and HK 36 TTS
2013-04-09		Costruzioni Aeronautiche Tecnam srl	P2006T
2013-05-01	S 2011-24-08	Turbomeca S.A.	Makila 1A2 turboshaft engines

**SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

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**Biweekly 2013-06**

2012-26-06	S 97-10-15	Erickson Air-Crane Incorporated	S-64F helicopters
2013-04-06		Eurocopter France	AS332C, AS332L, and AS332L1 helicopters
2013-05-14		Bell Helicopter Textron, Inc.	412 and 412EP helicopters
2013-05-17		Sikorsky Aircraft Corporation	S-61A, D, E, L, N, NM, R, and V helicopters
2013-05-23		Eurocopter France	AS332C, L, and L1 helicopters
2013-06-02		Diamond Aircraft Industries GmbH	DA 42 M-NG and DA 42 NG

**Biweekly 2013-07**

2004-21-08 R1		Cessna Aircraft Company	190, 195 (L-126A,B,C), 195A, and 195B
2008-07-11 R1		Pilatus Aircraft Ltd.	PC-12, PC-12/45, and PC-12/47
2013-03-10		Lindstrand Hot Air Balloons Ltd	Appliance: female ACME threaded hose connectors
2013-05-15		Robinson Helicopter Company	R44 and R44 II helicopters
2013-05-16		MD Helicopters, Inc.	369D, E, F, and FF helicopters
2013-05-21		Eurocopter France	EC130 B4 helicopters
2013-05-22		Agusta S.p.A.	A109, A109A, A109A II, A109C, A109K2, A109E, A109S, and A119 helicopters
2013-06-04		Reims Aviation S.A.	F406
2013-06-07		Eurocopter France	SA-365N1, AS-365N2, and AS 365 N3 helicopters
2013-06-51		See AD	See Ad

**Biweekly 2013-08**

2013-07-01		Diamond Aircraft Industries GmbH	DA 42, DA 42 M-NG, and DA 42 NG
2013-07-05		Eurocopter France	EC130B4 helicopters
2013-07-06		Eurocopter France	AS332C, AS332L, AS332L1, AS332L2, and EC225LP helicopters
2013-07-12		BRP Powertrain GmbH & Co KG Rotax	912 F2; 912 F3, 912 F4, 912 S2; 912 S3, 912 S4, 914 F2; 914 F3; and 914 F4 engines
2013-08-04		Grob-Werke	G115EG
2013-08-06		Bell Helicopter Textron Canada	430 helicopters
2013-08-07		Eurocopter France	AS332C, L, and L1 helicopters

**Biweekly 2013-09**

2004-21-08 R1		Cessna Aircraft Company	190, 195 (L-126A,B,C), 195A, and 195B
2012-25-01		Eurocopter France	AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters
2012-25-04		Eurocopter France	AS350B3 helicopters
2013-03-18		Eurocopter Deutschland GmbH	MBB-BK 117 C-2 helicopters
2013-08-05		Cessna Aircraft Company	525
2013-08-17		Eurocopter France	SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters
2013-08-19		Eurocopter France	AS350B, BA, B1, B2, B3, C, D, D1, AS355E, F, F1, F2, and N helicopters
2013-08-21		Diamond Aircraft Industries GmbH	DA 40 NG
2013-08-22		Turbomeca S.A.	1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines

**Biweekly 2013-10**

2013-04-08 R1		Diamond Aircraft Industries GmbH	HK 36 R, HK 36 TS, and HK 36 TTS powered gliders
2013-08-14	S 2005-12-02	Revo, Incorporated	COLONIAL C-1, COLONIAL C-2, LAKE LA-4, LAKE LA-4A, LAKE LA-4P, and LAKE LA-4-200
2013-09-05		Twin Commander Aircraft LLC	690, 690A, and 690B
2013-09-06		Agusta	A119 and AW119 MKII helicopters
2013-09-09	S 98-22-15	Slingsby Sailplanes Ltd.	Dart T.51, Dart T.51/17, and Dart T.51/17R sailplanes
2013-10-01		Spectrolab Nightsun XP Searchlight	Appliance: See AD
2013-10-51	E	Eurocopter France	AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters

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**Biweekly 2013-11**

2013-10-05		Eurocopter Deutschland GmbH	MBB-BK 117 C-2 helicopters
2013-11-02		Aircraft Industries a.s.	L-420
2013-11-09	S 2001-08-14R1	Turbomeca S.A.	Arrius 2B1 and 2F turboshaft engines

**Biweekly 2013-12**

2013-10-04	S 82-16-05 R1	Piper Aircraft, Inc.	PA-31, PA-31-325, and PA-31-350
2013-11-01		Iniziativa Industriali Italiane S.p.A.	Sky Arrow 650 TC, Sky Arrow 650 TCN, Sky Arrow 650TCS, and Sky Arrow 650TCNS
2013-11-05		Bell	214B, 214B-1, and 214ST helicopters
2013-11-13		Rolls-Royce plc	Viper Mk. 601-22 turbojet engines

**Biweekly 2013-13**

2013-06-51		Goodrich	Appliance: See AD
2013-11-08	S 2011-01-14	Pilatus Aircraft Ltd.	PC-6, PC-6-H1, PC-6-H2, PC-6/350, PC-6/350-H1, PC-6/350-H2, PC-6/A, PC-6/A-H1, PC-6/A-H2, PC-6/B-H2, PC-6/B1-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/C1-H2
2013-11-10		Cessna Aircraft Company	LC40-550FG, LC41-550FG, and LC42-550FG
2013-11-11	S 2000-04-01	Cessna Aircraft Company	172R, 172S, 182S, 182T, T182T, 206H and T206H
2013-11-15		Eurocopter Deutschland GmbH	BO-105A, BO-105C, BO-105S, BO-105LS A-1, BO 105 LS A-3, EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, EC135 T2+, MBB-BK117 A-1, MBB-BK117 A-3, MBB-BK117 A-4, MBB-BK117 B-1, MBB-BK117 B-2, and MBB-BK117 C-1, MBB-BK117 C-2 helicopters
2013-12-04		Eurocopter France	EC 155B, EC155B1, SA-366G1, SA-365N, SA-365N1, AS-365N2, and AS 365 N3 helicopters
2013-12-07		Bell Helicopter Textron Canada	407 helicopters
2013-13-02		B-N Group Ltd.	BN-2, BN-2A, BN2A MK. III, BN2A MK. III-2, BN2A MK. III-3, BN-2A-2, BN-2A-20, BN-2A-21, BN-2A-26, BN-2A-27, BN-2A-3, BN-2A-6, BN-2A-8, BN-2A-9, BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN-2T, and BN-2T-4R

**Biweekly 2013-14**

2012-23-13	COR	Sikorsky Aircraft Corporation	S-70, S-70A, and S-70C helicopters
2013-12-06		Eurocopter Deutschland	MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, and MBB-BK 117 C-2 helicopters
2013-13-01		Piper Aircraft, Inc.	PA-46-310P (Malibu), PA-46-350P (Mirage), PA-46R-350T (Matrix), and PA-46-500TP (Meridian)
2013-13-10		Pilatus Aircraft Ltd.	PC-7
2013-13-14		See AD	See AD

**Biweekly 2013-15**

2013-10-51		Eurocopter France	AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters
2013-12-05		Eurocopter Deutschland GmbH	MBB-BK 117 C-2 helicopters
2013-14-01		Pilatus Aircraft Ltd.	PC-6/B2-H4
2013-14-08		Austro Engine GmbH	E4 engines
2013-15-03		Eurocopter France	AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D and AS350D1 helicopters
2013-15-04		Hartzell Propeller, Inc.	HC-(1,D)2(X,V,MV)20-7, HC-(1,D)2(X,V,MV)20-8, and HC-(1,D)3(X,V,MV)20-8 propellers

**Biweekly 2013-16**

2013-13-06		See AD	See AD
2013-15-02	S 2008-10-03	Bell Helicopter Textron	205A, 205A-1, 205B, 210, 212, 412, 412CF, and 412EP helicopters
2013-16-06		Eurocopter Deutschland GmbH	BO-105A, BO-105C, BO-105LS A-1, BO-105LS A-3, and BO-105S helicopters

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**Biweekly 2013-17**

2011-22-05	COR, S 2003-22-06	EUROCOPTER FRANCE	AS350B, B1, B2, B3, BA, C, D, D1, AS355E, F, F1, F2, N, and NP helicopters
2012-11-02	COR, S 2008-22-51	Eurocopter Deutschland GmbH	EC135 helicopters
2012-25-04	COR, S 2012-21-51	Eurocopter France	AS350B3 helicopters
2013-15-19	S 2013-07-12	BRP Powertrain GmbH & Co KG Rotax	Rotax 912F, Rotax 912S, Rotax 914F, Rotax 912F, 912S, and 914F engines
2013-16-01		Beechcraft Corporation and Hawker Beechcraft Corporation	See AD
2013-16-04		Eclipse Aerospace, Inc.	EA500
2013-16-07		Eurocopter France	AS332C, AS332L, AS332L1, AS332L2, and EC225LP helicopters
2013-16-10		Hamilton Standard Division and Hamilton Sundstrand Corporation	See AD
2013-16-13		Eurocopter Deutschland GmbH	O-105A, BO-105C, BO-105S, BO-105LS A-1, BO-105LS A-3, MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK117 B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters
2013-16-16		Agusta S.p.A. and Bell Helicopter Textron Helicopters	See AD
2013-16-19		Eurocopter France	EC120B and EC130B4 helicopters
2013-16-20		Eurocopter Deutschland GmbH	MBB-BK 117 C-2 helicopters
99-07-10 R1		PIAGGIO AERO INDUSTRIES S.p.A	P-180

**Biweekly 2013-18**

2013-10-04	COR	Piper Aircraft, Inc.	PA-31, PA-31-325, and PA-31-350 airplanes
2013-16-05	S 64-07-05	Alexander Schleicher	AS -K13, Ka2B, Ka 6, Ka 6 B, Ka 6 BR, Ka 6 C, Ka 6 CR, K7, K8, and K 8 B sailplanes
2013-16-14		Eurocopter Deutschland	EC135 P1, P2, P2+, T1, T2, and T2+ helicopters
2013-17-01		Eurocopter France	AS350B, AS350BA, AS350B1, AS350B2, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, and AS355F2; AS350B3; AS355N and AS355NP helicopters
2013-17-04		Various Aircraft	Equipped with a Rotax Aircraft Engines 912 A series engine (See AD)
2013-18-03		Bell Helicopter Textron Canada	206A and 206B; 206L helicopters

**Biweekly 2013-19**

2013-13-01	COR	Piper Aircraft, Inc.	PA-46-310P (Malibu), PA-46-350P (Mirage), PA-46R-350T (Matrix), PA-46-500TP (Meridian)
2013-16-03		Eurocopter France	AS350C, D, D1, B, BA, B1, B2, and B3; and AS355E, F, F1, F2, N, and NP helicopters
2013-18-01		Eurocopter France	C 155B, EC155B1, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters
2013-18-04		Piaggio Aero Industries S.p.A	P-180
2013-18-05		Eurocopter Deutschland GmbH	EC135P1, EC135P2, EC135P2+, EC135T1, EC135T2, and EC135T2+ helicopters
2013-18-06		Bell Helicopter Textron Canada Limited	206A, 206B, 206L, 206L-1, 206L-3, 206L-4, 222, 222B, 222U, 230, 407, 427, and 430 helicopters
2013-18-07	S 76-12-07	Bell Helicopter Textron	204B and 205A-1 helicopters
2013-19-01		AgustaWestland S.p.A.	A119 and AW119 MKII helicopters

**Biweekly 2013-20**

2013-15-01		AgustaWestland S.p.A.	AB139 and AW139 helicopters
2013-19-05		Bell Helicopter Textron, Inc.	214B, 214B-1, and 214ST helicopters
2013-19-06		Robinson Helicopter Company	R22, R22 Alpha, R22 Beta, and R22 Mariner helicopters
2013-19-07		Eurocopter France	SA-365N, SA-365N1, AS-365N2, AS 365 N3, EC 155B, EC155B1, AS332C, AS332L, AS332L1, AS332L2, and EC225LP helicopters
2013-19-16		Sikorsky Aircraft Corporation	S-92A helicopters
2013-19-19		Eurocopter France	AS332C, AS332L, AS332L1, AS332L2, and EC225LP helicopters

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2013-20-51		AgustaWestland S.p.A	A109A, A109A II, A109C, A109E, A109K2, A109S, AW109SP, A119, and AW119 MKII helicopters
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**Biweekly 2013-21**

Due to the partial shutdown of the US Government, there were no AD's published in this Bi-weekly period.

**Biweekly 2013-22**

2013-19-24	S 2003-08-51	MD Helicopters, Inc.	369A, 369D, 369E, 369H, 369HE, 369HM, 369HS, 369F and 369FF helicopters
2013-20-01		Agusta	A109A, A109AII, and A109C helicopters
2013-20-02		Bell	230 helicopters
2013-20-03		Bell	430 helicopters
2013-20-05		Bell	407 helicopters
2013-20-15	S 97-19-10	Erickson Air-Crane Incorporated	CH-54A helicopters
2013-20-16		MD Helicopters, Inc.	MD 900 helicopters
2013-20-18		Bell Helicopter Textron, Inc.	412, 412EP, and 412CF helicopters
2013-20-51	S 2009-05-09	AgustaWestland S.p.A	A109A, A109A II, A109C, A109E, A109S, A109K2, AW109SP, A119 and AW119 MKII helicopters
2013-21-01		Eurocopter France	AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters
2013-21-02	S 2012-24-09	Lycoming and Continental Motors, Inc.	See Ad
2013-21-05		Eurocopter Deutschland GmbH	EC135 P1, P2, P2+, T1, T2, and T2+ helicopters
2013-22-01		Bell Helicopter Textron Canada	206L-4 and 407 helicopters



**2013-19-24 MD Helicopters, Inc.:** Amendment 39-17606; Docket No. FAA-2013-0401; Directorate Identifier 2012-SW-047-AD.

**(a) Applicability**

This AD applies to MD Helicopters, Inc. (MDHI), Model 369A, 369D, 369E, 369H, 369HE, 369HM, 369HS, 369F and 369FF helicopters with a tail rotor blade (blade) part number (P/N) 369D21640-501, 369D21640-503, 369D21641-501, 369D21641-503, 369D21642-501, 369D21642-503, 369D21643-501, or 369D21643-503 installed, or with a Helicopter Technology Company blade P/N 500P3100-101, 500P3100-301, 500P3300-501, or 500P3500-701 installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as the tail rotor blade pitch horn (pitch horn) separating from the tail rotor blade, leading to an unbalanced condition, vibration, loss of tail rotor pitch control and loss of directional control of the helicopter.

**(c) Affected ADs**

This AD supersedes AD No. 2003-08-51, Amendment 39-13215 (68 FR 39449, July 2, 2003; correction 68 FR 47447, August 11, 2003).

**(d) Effective Date**

This AD becomes effective December 5, 2013.

**(e) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(f) Required Actions**

(1) Before further flight, for each applicable blade, revise the Airworthiness Limitations section of the maintenance manual to reflect that the blade has a retirement life of 400 hours time-in-service (TIS).

(2) For helicopters with an applicable blade installed that has 390 through 700 hours TIS, within 10 hours TIS, replace the blade with an airworthy blade.

(3) For all other applicable helicopters, within 60 days, and thereafter at intervals not to exceed one year, remove the paint from the blade pitch control arm in accordance with the Accomplishment Instructions, Section 2.A.(1) through 2.A.(3), of MDHI Service Bulletins SB369D-210, SB369E-105, SB369F-091, and SB369H-252, all dated November 21, 2011, as applicable to your model helicopter.

(i) Using a 10X or higher power magnifying glass, inspect all four sides and the pocket of the blade pitch control arm for a crack, pitting, or corrosion and for the condition of the dimpled shot

peen surface by referring to Figure 1 of MDHI Service Bulletins SB369D-210, SB369E-105, SB369F-091, and SB369H-252, as applicable to your model helicopter, and by reviewing the rotorcraft maintenance records to determine whether rework was done in this area.

(ii) If there is pitting, corrosion, a crack, blending or removal of any of the dimpled shot peen surface, or any indication that the shot peen has not been done, replace the blade with an airworthy blade.

(iii) If there is no pitting, corrosion, cracks, or blending or removal of any of the dimpled shot peen surface, refinish the stripped pitch control arm in accordance with the Accomplishment Instructions, Section 2.A.(6) through 2.A.(7), of MDHI Service Bulletins SB369D-210, SB369E-105, SB369F-091, and SB369H-252, as applicable to your model helicopter.

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

(1) The Manager, Los Angeles Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Fred Guerin, Aviation Safety Engineer, Los Angeles Aircraft Certification Office, Transport Airplane Directorate, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone (562) 627-5232; email fred.guerin@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(3) AMOCs approved previously in accordance with AD No. 2003-08-51 (68 FR 39449, July 2, 2003; correction 68 FR 47447, August 11, 2003) are approved as AMOCs for the corresponding requirements in this AD.

**(h) Additional Information**

MD Helicopters, Inc., maintenance manuals CSP-HMI2, TR12-001, CHP-H-4, and TR12-001, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; email serviceengineering@mdhelicopters.com; Web site <http://www.mdhelicopters.com> or contact Helicopter Technology Company, 12923 South Spring Street, Los Angeles, CA 90061; telephone 310-523-2750; email gburdorf@helicoptertech.com; Web site [www.helicoptertech.com](http://www.helicoptertech.com). You may review a copy of this information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**(i) Subject**

Joint Aircraft Service Component (JASC) Code: 6410, Tail Rotor Blades.

**(j) Material Incorporated by Reference**

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

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

(i) MD Helicopters Service Bulletin SB369D-210, dated November 21, 2011.

(ii) MD Helicopters Service Bulletin SB369E-105, dated November 21, 2011.

(iii) MD Helicopters Service Bulletin SB369F-091, dated November 21, 2011.

(iv) MD Helicopters Service Bulletin SB369H-252, dated November 21, 2011.

Note 1 to paragraph (j)(2): MD Helicopters Service Bulletins SB369D-210, SB369E-105, SB369F-091, and SB369H-252, all dated November 21, 2011, are co-published as one document.

(3) For MD Helicopters service information identified in this AD, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; email [serviceengineering@mdhelicopters.com](mailto:serviceengineering@mdhelicopters.com); Web site <http://www.mdhelicopters.com>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on September 18, 2013.

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



**2013-20-01 Agusta S.p.A. (Type Certificate Currently Held By Agustawestland S.p.A.)**

(Agusta): Amendment 39-17607; Docket No. FAA-2013-0518; Directorate Identifier 2009-SW-021-AD.

**(a) Applicability**

This AD applies to Agusta Model A109A, A109AII, and A109C helicopters with a third stage turbine wheel, part number 23065833, installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a third stage turbine vibration, which could result in turbine failure, engine power loss, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 30 days:

(1) For Model A109A helicopters, revise the Power Plant Limitations section, page 1-7, of the Model A109A Rotorcraft Flight Manual (RFM) by inserting page 5 of Agusta Bollettino Tecnico No. 109-129, dated February 16, 2009 (BT 109-129).

(2) For Model A109AII helicopters, revise the Power Plant Limitations section, page 1-6, of the Model A109AII RFM by inserting page 6 of BT 109-129.

(3) For Model A109C helicopters, revise the Power Plant and Transmission Limitations section, page 1-8, of the Model A109C RFM by inserting page 7 of BT 109-129.

(4) Install a placard on the instrument panel adjacent to the Engine and Rotor RPM Power Turbine (N2) Indicator that states: MIN. CONT. 97% N2-MIN. TRANS. 95% N2.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector,

the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2009-0037-E, dated February 19, 2009. You may view the EASA AD on the internet in the AD Docket at <http://www.regulations.gov>.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 7250: Turbine Section.

**(i) Material Incorporated by Reference**

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

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

(i) Agusta Bollettino Tecnico No. 109-129, dated February 16, 2009.

(ii) Reserved.

(3) For Agusta service information identified in this AD, contact Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39-0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bulletins>.

(4) You may review this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

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

Issued in Fort Worth, Texas, on September 20, 2013.

Scott A. Horn,  
Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



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**2013-20-02 Bell Helicopter Textron Canada Limited (Bell):** Amendment 39-17608; Docket No. FAA-2013-0492; Directorate Identifier 2008-SW-013-AD.

**(a) Applicability**

This AD applies to Bell Model 230 helicopters, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a third stage turbine vibration, which could result in turbine failure, engine power loss, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 30 days:

- (1) Revise the Operating Limitations section of the Model 230 Rotorcraft Flight Manual by inserting Section 1, Limitations, page 1-12, of Bell BHT-230-FM-1, revision 5, dated May 6, 2005.
- (2) Install placard part number 230-075-213-115, or equivalent, on the instrument panel directly below the No. 1 and No. 2 engine oil temp/press indicator.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) Bell Alert Service Bulletin No. 230-05-33, dated June 10, 2005, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 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/>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2005-24, dated July 4, 2005. You may view the TCCA AD on the internet in the AD Docket at <http://www.regulations.gov>.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 7250: Turbine Section.

**(i) Material Incorporated by Reference**

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

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

(i) Page 1-12 of Section 1, Limitations, of Bell Rotorcraft Flight Manual BHT-230-FM-1, Revision 5, dated May 6, 2005.

(ii) Reserved.

(3) For Bell service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 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/>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on September 19, 2013.

Scott A. Horn,  
Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



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**2013-20-03 Bell Helicopter Textron Canada Limited (Bell):** Amendment 39-17609; Docket No. FAA-2013-0491; Directorate Identifier 2008-SW-012-AD.

**(a) Applicability**

This AD applies to Bell Model 430 helicopters, serial number 49001 through 49111, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a third stage turbine vibration, which could result in turbine failure, engine power loss, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 30 days:

(1) Revise the Operating Limitations section of the Model 430 Rotorcraft Flight Manual by inserting Section 1, Limitations, page 1-7, of Bell BHT-430-FM-1, revision 18, dated September 1, 2009.

(2) Install placard part number 230-075-213-113, or equivalent, on the instrument panel directly below the pilot audio select panel.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) Bell Alert Service Bulletin No. 430-05-34, dated June 10, 2005, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 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/>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2005-25, dated July 5, 2005. You may view the TCCA AD on the internet in the AD Docket at <http://www.regulations.gov>.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 7250: Turbine Section.

**(i) Material Incorporated by Reference**

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

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

(i) Page 1-7 of Section 1, Limitations, of Bell Rotorcraft Flight Manual BHT-430-FM-1, revision 18, dated September 1, 2009.

(ii) Reserved.

(3) For Bell service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 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/>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on September 18, 2013.

Scott A. Horn,  
Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



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**2013-20-05 Bell Helicopter Textron Canada Limited (Bell):** Amendment 39-17611; Docket No. FAA-2013-0490; Directorate Identifier 2008-SW-004-AD.

**(a) Applicability**

This AD applies to Bell Model 407 helicopters, serial numbers 53000 through 53644, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a third stage turbine vibration, which could result in turbine failure, engine power loss, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 30 days:

(1) Revise the Operating Limitations section of the Model 407 Rotorcraft Flight Manual by inserting Section 1, Limitations, pages 1-6 and 1-14, of Bell BHT-407-FM-1, revision 3, dated April 26, 2005.

(2) Remove placard part number (P/N) 230-075-213-105, if installed.

(3) Install placard P/N 230-075-213-111, or equivalent, directly below the NR/NP dual tachometer.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Chinh Vuong, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [chinh.vuong@faa.gov](mailto:chinh.vuong@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) Bell Alert Service Bulletin No. 407-05-67, dated June 8, 2005, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 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/>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2004-09R1, dated July 4, 2005. You may view the TCCA AD on the internet in the AD Docket at <http://www.regulations.gov>.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 7250: Turbine Section.

**(i) Material Incorporated by Reference**

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

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

(i) Pages 1-6 and 1-14 of Section 1, Limitations, of Bell Rotorcraft Flight Manual BHT-407-FM-1, Revision 3, dated April 26, 2005.

(ii) Reserved.

(3) For Bell service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 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/>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on September 20, 2013.

Scott A. Horn,  
Acting Directorate Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



**2013-20-15 SIKORSKY AIRCRAFT CORPORATION-MANUFACTURED (SIKORSKY) MODEL HELICOPTERS (TYPE CERTIFICATE CURRENTLY HELD BY ERICKSON AIR-CRANE INCORPORATED):** Amendment 39-17621; Docket No. FAA-2013-0454; Directorate Identifier 2009-SW-81-AD.

**(a) Applicability**

This AD applies to Sikorsky Model CH-54A helicopters, now under the Erickson Air-Crane Incorporated (Erickson) Model S-64E type certificate, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as fatigue cracking in a flight critical component, failure of the component, and subsequent loss of control of the helicopter.

**(c) Affected ADs**

This AD supersedes AD 97-19-10, Amendment 39-10130 (62 FR 47933, September 12, 1997).

**(d) Effective Date**

This AD becomes effective December 5, 2013.

**(e) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(f) Required Actions**

(1) Before further flight, for each part listed in Table 1 to paragraph (f) of this AD:

(i) Remove any part that has reached or exceeded its newly established or revised retirement life.

(ii) Record the newly established or revised retirement life for each part on the component history card or equivalent record.

(iii) Make pen and ink changes or insert a copy of this AD into the Airworthiness Limitations section of the maintenance manual to establish or revise the retirement life for each part that is listed in Table 1 to paragraph (f) of this AD.

**Table 1 to Paragraph (f) of This AD—Parts With New or Revised Life Limits**

<b>Part name</b>	<b>Part No. (P/N)</b>	<b>Retirement life</b>
Rod and bushing assembly, main rotor (M/R)	6410-21090-012	5,700 hours time-in-service (TIS) or 60 months since the initial installation on any helicopter, whichever occurs first.

Rod and bushing assembly, M/R	6410-21090-013 or -014	5,700 hours TIS.
Lower plate, M/R hub	6410-23009-102	3,000 hours TIS.
Upper plate, M/R hub	6410-23011-102	3,000 hours TIS.
Swashplate, rotating, M/R	6410-24002-101	12,860 hours TIS.
Piston rod	6410-26005-104	10,500 hours TIS.
Cylinder, damper assembly	6410-26215-101	7,300 hours TIS.
M/R blade	6415-20201-045 or -047	3,300 hours TIS.
M/R blade	6415-20201-048, -049, -050, or -051	20,000 hours TIS.
Truss assembly, stabilizer	6420-66250-041	4,720 hours TIS.
M/R shaft assembly (includes shaft, P/N 6435-20078-104)	6435-20078-014 or -015	2,600 hours TIS.
M/R shaft assembly (includes shaft, P/N 6435-20078-105)	6435-20078-016	5,000 hours TIS.
Second stage planetary plate assembly, main gearbox assembly	6435-20231-012, -014, or -015	1,300 hours TIS.
Second stage planetary plate assembly, main gearbox assembly	6435-20231-016	2,600 hours TIS.
Oil cooler and support assembly	6435-60050-044	9,885 hours TIS.
Tail rotor (T/R) blade	65160-00001-042, -045, or -048	23,300 hours TIS.
T/R blade	65161-00001-042	23,300 hours TIS.
Hub, M/R	S1510-23001-005	3,000 hours TIS.
Spindle assembly, M/R	S1510-23027-5	5,675 hours TIS.
Horn assembly, M/R	S1510-23350-4, -6, or -8	9,710 hours TIS.
Sleeve, M/R	S1510-23351-2	12,930 hours TIS.
Sleeve lockwasher, M/R	S1510-23458-0	2,700 hours TIS.
Cuff, M/R blade	S1515-20320-0	6,410 hours TIS.
Cuff, M/R blade	S1515-20320-001 or -002	12,930 hours TIS.

Piston assembly, M/R tandem servo	S1565-20443-0 or S1565-20443-301	8,100 hours TIS.
Fork assembly, M/R tandem servo	S1565-20449 or S1565-20449-301	8,100 hours TIS.
Bearing, T/R drive shaft	SB1111-004 or -601	1,000 hours TIS or 12 months while installed on any helicopter, whichever occurs first.

Note to Table 1 to paragraph (f) of this AD: The list of parts in Table 1 to paragraph (f) of this AD contains only a portion of the life-limited parts for this model helicopter and is not an all-inclusive list.

(2) Before further flight, remove from service any part with a P/N listed in Table 2 to Paragraph (f) of this AD, regardless of the part's TIS. The part numbers listed in Table 2 to paragraph (f)(2) of this AD are not eligible for installation on any helicopter.

**Table 2 to Paragraph (f) of This AD—Parts To Be Removed From Service**

Part name	P/N
Rod and bushing assembly, M/R	6410-21090-011.
M/R blade	6415-20001-013, -014, or -015.
Pylon stabilizer	6420-66201-010, -014, or -015.
M/R shaft assembly	6435-20078-013.
Oil cooler and support assembly	6435-60050-043.
Pitch change link, rotary rudder	65113-07100-046.
Spindle, M/R blade	S1510-23070-3.

(3) Within 20 hours TIS, and thereafter at intervals not to exceed 20 hours TIS, visually inspect each M/R servo and control arm assembly, P/N S1565-20421-10, -11, -041, or -043, and determine if there is any oil leaking from the M/R tandem servo housing assembly (servo housing), P/N S1565-20252-2. If there is any oil leaking from the servo housing, before further flight, replace the M/R servo and control arm assembly.

(4) Within 20 hours TIS or before reaching 1,120 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 200 hours TIS or 12 months, whichever occurs first, ultrasonic (UT) inspect each M/R hub horizontal hinge pin (hinge pin), P/N S1510-23099-1 or P/N S1510-23099-001, for a crack in accordance with the Accomplishment Instructions, paragraphs 2.A through 2.C, of Erickson Service Bulletin No. 64B10-3, Revision D, dated October 15, 2007, except you are not required to contact Erickson nor send hinge pins to them. A non-destructive testing (NDT) UT Level I Special, Level II, or Level III inspector who is qualified under the guidelines established by ASNT SNT-TC-1A, ISO 9712, or an FAA-accepted equivalent qualification standard for NDT inspection and evaluation, must perform the UT inspection.

(5) Within 150 hours TIS or before reaching 1,450 hours TIS, whichever occurs later, perform a fluorescent-magnetic particle inspection (MPI) of each second stage planetary plate assembly, P/N 6435-20231-016, for a crack.

(6) Within 150 hours TIS or before reaching 1,450 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 650 hours TIS, perform an MPI of each M/R shaft, P/N 6435-20078-104, for a crack, paying particular attention to the lower spline area.

(7) Within 150 hours TIS or before reaching 1,450 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 1,450 hours TIS, perform an MPI of each M/R shaft, P/N 6435-20078-105, for a crack, paying particular attention to the lower spline area.

(8) Within 150 hours TIS or before reaching 3,375 hours TIS, whichever occurs later, and thereafter at intervals not to exceed 3,375 hours TIS, perform a fluorescent penetrant inspection of each housing lug on each servo housing, P/N S1565-20252-2, for a crack.

(9) At each overhaul of the main gearbox assembly, P/N 6435-20400-053, -054, -058, -060, -062, -063, -064, -065, or -066, perform an MPI of the entire shaft of each M/R shaft assembly, P/N 6435-20078-014, -015, or -016, for a crack, paying particular attention to the rotating swashplate spherical bearing ball travel area, which is located approximately ten inches above the upper roller bearing journal shoulder.

(10) If there is a crack in any part, before further flight, replace the cracked part.

(11) At each overhaul of the damper assembly, P/N 6410-26200-042, replace the following parts with airworthy parts that have zero (0) hours TIS:

(i) All Air Force-Navy Aeronautical Standard (AN), Aerospace Standard (AS), Military Standard (MS), and National Aerospace Standard (NAS) nuts, bolts, washers, and packings, except packing, P/N MS28775-011, installed on stud, P/N SHF111-11SN-12A;

(ii) Lock washer, P/N SS5073-2;

(iii) Nut, P/N SS5081-05;

(iv) Felt seal, P/N S1510-26017;

(v) Retaining ring, P/N UR106L; and

(vi) Nut, P/N 6410-26214-101.

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

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, Aerospace Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5170; email 7-avs-asw-170@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

### **(h) Additional Information**

Erickson Service Bulletin No. 64B General-1, Revision 19, dated September 15, 2010, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact Erickson Air-Crane Incorporated, ATTN: Chris Erickson, Director of Regulatory Compliance, 3100 Willow Springs Rd., P.O. Box 3247, Central Point, OR 97502, telephone (541) 664-5544, fax (541) 664-2312, email address cerickson@ericksonaircrane.com. You may review a copy of this information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

### **(i) Subject**

Joint Aircraft Service Component (JASC) Code: 6200: Main Rotor System; 6300: Main Rotor Drive System; 6410: Tail Rotor Blades; 6500: Tail Rotor Drive System.

**(j) Material Incorporated by Reference**

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

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

(i) Erickson Service Bulletin No. 64B10-3, Revision D, dated October 15, 2007.

(ii) Reserved.

(3) For Erickson service information identified in this AD, contact Erickson Air-Crane Incorporated, ATTN: Chris Erickson, Director of Regulatory Compliance, 3100 Willow Springs Rd, P.O. Box 3247, Central Point, OR 97502, telephone (541) 664-5544, fax (541) 664-2312, email address [cerickson@ericksonaircrane.com](mailto:cerickson@ericksonaircrane.com).

(4) You may view this service information that is incorporated by reference at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

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

Issued in Fort Worth, Texas, on September 25, 2013.

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



**2013-20-16 MD Helicopters, Inc. (MDHI):** Amendment 39-17622; Docket No. FAA-2013-0486; Directorate Identifier 2010-SW-031-AD.

**(a) Applicability**

This AD applies to Model MD 900 helicopters with a main rotor blade retention bolt (bolt), part number (P/N) 900R3100001-103 or 900R3100001-105, installed; certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as bolt failure. This condition could result in loss of main rotor blade structural integrity and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

(1) Before the first flight of each day:

(i) Visually check each bolt for failure. Failure of a bolt may be indicated by movement of the bolt out of the bolt hole or by inconsistent extension of the bolt above or below the other bolts being inspected (a failed bolt migrates out of the bolt hole).

(ii) Visually check for a gap between the thrust washer and the retainer, P/N 900R2100009-101 or -103. The thrust washer is depicted as item 2 and the retainer is depicted as item 8 in Figure 1 to paragraph (e) of this AD.

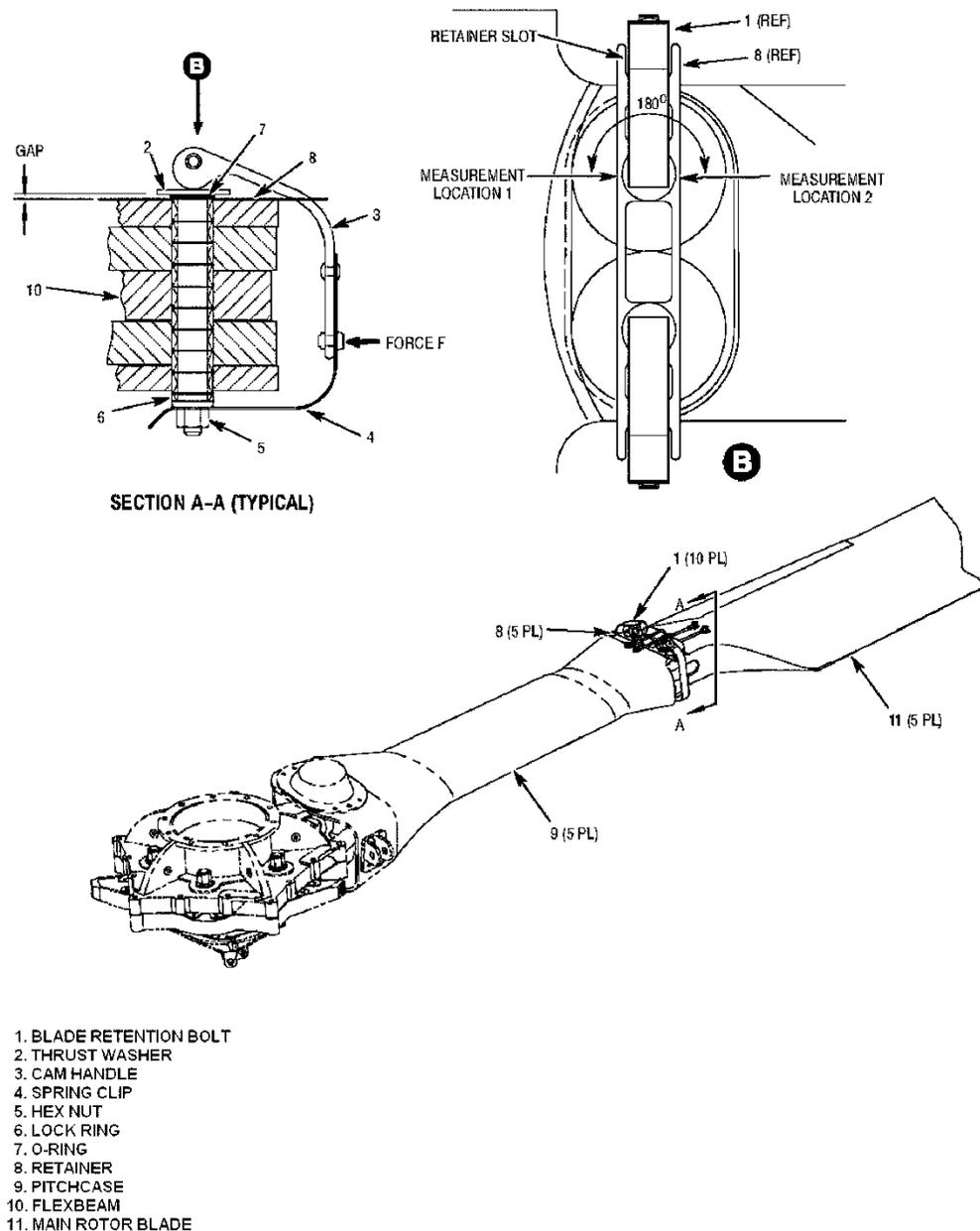


Figure 1 to Paragraph (e)  
Gap and Force Check of the Blade Retention Bolts

(iii) The actions required by paragraphs (e)(1)(i) and (e)(1)(ii) may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft maintenance records showing compliance with this AD in accordance with 14 CFR 43.9(a)(1)-(4) and 14 CFR 91.417(a)(2)(v). The record must be maintained as required by 14 CFR 91.417, 121.380, or 135.439.

(iv) If there is any indication of bolt failure or if there is no gap between the thrust washer and retainer, before further flight, remove and inspect the bolt for a crack. Replace any cracked bolt with an airworthy bolt.

(2) Within 300 hours time-in-service (TIS), and thereafter at intervals not to exceed 300 hours TIS, inspect each bolt for a gap between the thrust washer and the retainer.

(i) Determine whether an O-ring is installed. Install any missing O-ring.

(ii) If there is no gap between the thrust washer and retainer, before further flight, remove and inspect the bolt for a crack. Replace any cracked bolt with an airworthy bolt.

(iii) If there is a gap between the thrust washer and retainer, measure the gap in two locations, 180 degrees apart, with a feeler gage. If the gap is more than 0.100 inch (2.54 mm) at either location, before further flight, remove and inspect the bolt for a crack. Replace any cracked bolt with an airworthy bolt.

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

(1) The Manager, Los Angeles Aircraft Certification Office, Airframe Branch (ANM-120L), FAA, may approve AMOCs for this AD. Send your request to Roger Durbin, Aerospace Engineer, FAA, Los Angeles Aircraft Certification Office, Airframe Branch, ANM-120L, 3960 Paramount Blvd., Lakewood, CA 90712, telephone (562) 627-5233, fax (562) 627-5210, email roger.durbin@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

MDHI Alert Service Bulletin SB900-116R1, dated April 9, 2010, which supersedes MDHI Alert Service Bulletin SB SB900-116, dated February 24, 1010, neither of which is incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact MDHI, Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734, telephone (800) 388-3378, fax (480) 346-6813, or at <http://www.mdhelicopters.com>. You may review copies of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas.

**(h) Subject**

Joint Aircraft System Component: 6210: Main rotor blade retention bolts.

Issued in Fort Worth, Texas, on September 27, 2013.

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



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**2013-20-18 Bell Helicopter Textron, Inc.:** Amendment 39-17624; Docket No. FAA-2013-0500; Directorate Identifier 2012-SW-45-AD.

**(a) Applicability**

This AD applies to Model 412 and 412EP helicopters with a main rotor yoke assembly (yoke), part number (P/N) 412-010-101-123, -127, -129, or -133, installed; and Model 412CF helicopters with a yoke, P/N 412-010-101-127 or -129, installed; certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as fatigue cracking of a yoke, failure of the yoke, and subsequent loss of control of the helicopter.

**(c) Affected ADs**

This AD supersedes AD 2009-05-09, Amendment 39-15833 (74 FR 11001, March 16, 2009).

**(d) Effective Date**

This AD becomes effective November 29, 2013.

**(e) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time, unless it has been accomplished previously.

**(f) Required Actions**

Within 10 hours time-in-service (TIS):

(1) Review the helicopter records to determine all of the helicopter models on which an affected yoke has been installed since its production and the hours TIS of each affected yoke.

(2) If an affected part-numbered yoke has ever been installed on a Model 412CF helicopter or on a Model 412 or 412EP helicopter with a slope landing kit, P/N 412-704-012-101, installed, do the following:

(i) Reidentify the P/N on the side of the yoke by using a vibrating stylus and etching two lines through the last three digits of the existing P/N and etching "137FM" adjacent to where you etched through the last three digits of the original P/N. This converts each affected yoke P/N to a new yoke P/N 412-010-101-137FM. The serial number remains the same.

Note 1 to paragraph (f)(2)(i) of this AD: The "FM" P/N suffix denotes a field-modified part.

(ii) Treat the etched surface with chemical film, and apply primer and paint.

(iii) Record the reidentified P/N on the applicable component history card or equivalent record.

(3) If you cannot determine all the model helicopters on which an affected yoke has been installed since its production or whether it has ever been installed on a Model 412 or 412EP helicopter with a slope landing kit, P/N 412-704-012-101, installed, perform the actions required by paragraphs (f)(2)(i) through (f)(2)(iii) of this AD.

(4) For each reidentified yoke, P/N 412-010-101-137FM, reduce the retirement life from 5,000 hours TIS to 4,500 hours TIS. Record the revised life limit on the applicable component history card or equivalent record.

(5) Revise the Airworthiness Limitations section of the applicable maintenance manual or the Instructions for Continued Airworthiness by reducing the retirement life from 5,000 hours TIS to 4,500 hours TIS for each reidentified yoke, P/N 412-010-101-137FM.

**(g) Special Flight Permit**

Special flight permits will not be issued.

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

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, ASW-170, Aviation Safety Engineer, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5170, fax (817) 222-5783; email 7-avs-asw-170@faa.gov.

(2) For operations conducted under 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(i) Additional Information**

Bell Helicopter Textron, Inc. Alert Service Bulletins No. 412-08-128 and No. 412CF-08-35, both Revision A and both dated April 14, 2009, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101; telephone (817) 280-3391; fax (817) 280-6466; or at <http://www.bellcustomer.com/files/>. You may review service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**(j) Subject**

Joint Aircraft System/Component (JASC) Code: 6220 Main Rotor Head.

Issued in Fort Worth, Texas, on September 27, 2013.

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



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**2013-20-51 Agusta S.p.A:** Amendment 39-17628; Docket No. FAA-2013-0881; Directorate Identifier 2013-SW-056-AD.

**(a) Applicability**

This AD applies to the following Agusta S.p.A. (Type certificate currently held by AgustaWestland S.p.A) (Agusta) helicopters, with a tail rotor drive shaft flexible disc coupling (Thomas coupling) nut, part number (P/N) MS21042L4, certificated in any category:

- (i) Model A109A, A109A II, A109C, A109E, A109S, A109K2, AW109SP helicopters; and
- (ii) Model A119 and AW119 MKII helicopters.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a production deficiency in a certain Thomas coupling nut. This condition could result in failure of the Thomas coupling, failure of the tail drive shaft, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD is effective October 25, 2013 to all persons except those persons to whom it was made immediately effective by Emergency AD 2013-20-51, issued on October 3, 2013, which contained the requirements of this amendment.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

(1) Before further flight, using a borescope or light source and mirror, inspect each Thomas coupling nut for a crack. If any Thomas coupling nut is cracked, before further flight, replace all the Thomas coupling nuts with nuts, P/N NAS1805-4, torquing each nut to 5.6-7.9 Nm.

(2) Within 10 hours time-in-service or 30 days, whichever occurs first, replace each Thomas coupling nut, P/N MS21042L4, with a nut, P/N NAS1805-4, torquing each nut to 5.6-7.9 Nm.

(3) After the effective date of this EAD, do not install a nut, P/N MS21042L4, on any Thomas coupling.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to Gary Roach, Aviation Safety Engineer, Regulations and Policy Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5110; email [gary.b.roach@faa.gov](mailto:gary.b.roach@faa.gov).

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

(1) Agusta Alert Bollettino Tecnico (ABT) No. 109K-58, ABT No. 109-136, ABT No. 109EP-130, ABT No. 109L-066, ABT No. 109S-055, ABT No. 109SP-069, and ABT No. 119-061, all dated September 20, 2013, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact: Agusta Westland, Customer Support & Services, Via Per Tornavento 15, 21019 Somma Lombardo (VA) Italy, ATTN: Giovanni Cecchelli; telephone 39-0331-711133; fax 39 0331 711180; or at <http://www.agustawestland.com/technical-bullettins>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) Emergency Airworthiness Directive 2013-0225-E, effective September 21, 2013. You may view the EASA AD at <http://www.regulations.gov> in Docket No. FAA-2013-0881.

**(h) Subject**

Joint Aircraft Service Component (JASC): 6400 Tail rotor system.

Issued in Fort Worth, Texas, on October 16, 2013.

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



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**2013-21-01 Eurocopter France:** Amendment 39-17625; Docket No. FAA-2013-0878; Directorate Identifier 2013-SW-033-AD.

**(a) Applicability**

This AD applies to Eurocopter France (Eurocopter) Model AS350B, AS350BA, AS350B1, AS350B2, AS350B3, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP helicopters with tail rotor hub pitch horn (pitch horn) assembly, part number (P/N) 350A121368.01, 350A121368.02, 350A121368.03, or 350A121368.04, with a pitch horn, P/N 350A121368.XX, where XX stands for two digit dash number, installed, certificated in any category. The pitch horn may be marked with either the pitch horn assembly P/N or pitch horn P/N.

**(b) Unsafe Condition**

This AD defines the unsafe condition as a crack in the yoke of a pitch horn. This condition could result in failure of a pitch horn, loss of the anti-torque function, and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective October 25, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

(1) For parts with 135 to 155 hours time-in-service (TIS), before exceeding 165 hours TIS, or for parts with more than 155 hours TIS, within 10 hours TIS, visually inspect each pitch horn for a crack in the areas shown in Figure 1 of Eurocopter Emergency Alert Service Bulletin (EASB) No. 05.00.74 or No. 05.00.65, both Revision 1 and both dated June 25, 2013, as appropriate for your model helicopter.

(2) If there is a crack, before further flight, replace the pitch horn with an airworthy pitch horn.

(3) Do not install a pitch horn, P/N 350A121368 (any dash number), on any helicopter unless it has passed a dye penetrant inspection for a crack in the areas shown in Figure 1 of EASB No. 05.00.74 or No. 05.00.65.

**(f) Special Flight Permits**

Special flight permits are prohibited.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Robert Grant, Aviation Safety Engineer, Safety Management Group, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email robert.grant@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office, before operating any aircraft complying with this AD through an AMOC.

**(h) Additional Information**

The subject of this AD is addressed in European Aviation Safety Agency (EASA) No. AD 2013-0133, dated June 28, 2013. You may view the EASA AD on the Internet at <http://www.regulations.gov> in Docket No. FAA-2013-0878.

**(i) Subject**

Joint Aircraft Service Component (JASC) Code: 6400 Tail Rotor.

**(j) Material Incorporated by Reference**

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

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

(i) Eurocopter Emergency Alert Service Bulletin No. 05.00.74, Revision 1, dated June 25, 2013.

(ii) Eurocopter Emergency Alert Service Bulletin No. 05.00.65, Revision 1, dated June 25, 2013.

Note to paragraph (j)(2): Eurocopter Emergency Alert Service Bulletin No. 05.00.74 and No. 05.00.65, both Revision 1 and both dated June 25, 2013, are co-published as one document along with Eurocopter Emergency Alert Service Bulletin No. 05.00.49 and No. 05.00.44, both Revision 1 and both dated June 25, 2013, which are not incorporated by reference in this AD.

(3) For Eurocopter service information identified in this AD, American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on October 7, 2013.

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



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**2013-21-02 Lycoming Engines and Continental Motors, Inc.:** Amendment 39-17626; Docket No. FAA-2012-1245; Directorate Identifier 2012-NE-41-AD.

**(a) Effective Date**

This AD is effective November 13, 2013.

**(b) Affected ADs**

This AD supersedes AD 2012-24-09, Amendment 39-17279 (77 FR 72203, December 5, 2012; corrected January 14, 2013 (78 FR 2615)).

**(c) Applicability**

This AD applies to certain Lycoming Engines TIO-540-AK1A, and Continental Motors, Inc. (CMI) LTSIO-360-RB, TSIO-360-MB, TSIO-360-SB, and TSIO-360-RB reciprocating engines with a Hartzell Engine Technologies (HET) turbocharger installed that has a model number, part number, and serial number identified in Tables 1 and 2 of HET Alert Service Bulletin (ASB) No. 048, dated November 16, 2012.

**(d) Unsafe Condition**

This AD was prompted by a report that an additional engine, the CMI LTSIO-360-RB, has the affected HET turbochargers installed. We are issuing this AD to prevent turbocharger turbine wheel failure, reduction or complete loss of engine power, loss of engine oil, oil fire, and damage to the airplane.

**(e) Compliance**

- (1) Comply with this AD within the compliance times specified, unless already done.
- (2) After the effective date of this AD and before further flight, remove from service any turbocharger identified in Tables 1 and 2 of HET ASB No. 048, dated November 16, 2012.

**(f) Prohibitions**

After the effective date of this AD, do not return to service, and do not operate without a special flight permit, any engine with an HET turbocharger installed that is identified in Tables 1 and 2 of HET ASB No. 048, dated November 16, 2012.

**(g) Special Flight Permits**

Special flight permits are limited to when:

- (1) Ferry flights do not exceed three hours duration;
- (2) The turbocharger boost is set to "Off" in the cockpit (if equipped); and
- (3) The wastegate for the turbocharger is safety wired in the locked open position.

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

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

(2) AMOCs approved for AD 2012-24-09 (77 FR 72203, December 5, 2012; corrected January 14, 2013 (78 FR 2615)) remain in effect for this AD.

**(i) Related Information**

For more information about this AD, contact Christopher Richards, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-7156; fax: 847-294-7834; email: christopher.j.richards@faa.gov.

**(j) Material Incorporated by Reference**

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

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

(3) The following service information was approved for IBR on December 20, 2012 (77 FR 72203, December 5, 2012; corrected January 14, 2013 (78 FR 2615)).

(i) Hartzell Engine Technologies Alert Service Bulletin No. 048, dated November 16, 2012.

(ii) Reserved.

(4) For service information identified in this AD, contact Hartzell Engine Technologies, LLC, 2900 Selma Highway, Montgomery, AL 36108, phone: 334-386-5400; fax: 334-386-5450; Internet: <http://www.hartzellenginetech.com>.

(5) You may view this service information at the FAA, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(6) You may view this service information 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](http://www.archives.gov/federal-register/cfr/ibr_locations.html).

Issued in Burlington, Massachusetts, on October 8, 2013.

Colleen M. D'Alessandro,  
Assistant Directorate Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.



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**2013-21-05 Eurocopter Deutschland GmbH:** Amendment 39-17629; Docket No. FAA-2013-0446; Directorate Identifier 2010-SW-007-AD.

**(a) Applicability**

This AD applies to Model EC135 P1, P2, P2+, T1, T2, and T2+ helicopters, with bearing, part number (P/N) LN9367GE6N2; rod, P/N L671M5040205; lever, P/N L671M5040101; and floor, P/N L533M1014101, L533M1014102, L533M1014103, L533M1014104, L533M1014105 or L533M1014106, installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as limited control of a tail rotor because of the binding of a bearing. This condition could result in subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

(1) Within 100 hours time-in-service (TIS) and thereafter at intervals not to exceed 800 hours TIS, inspect each bearing for freedom of movement by turning and tilting the bearing as depicted in Figure 2 of Eurocopter Alert Service Bulletin No. EC135-67A-012, Revision 1, dated October 18, 2006 (ASB). During any inspection:

(i) If there is binding or rough turning, before further flight, replace the bearing with an airworthy bearing.

(ii) If there is chafing on the lower side of the floor that does not extend through the panel outer layer, before further flight, replace the bearing with an airworthy bearing.

(iii) If there is damage on the lower side of the floor in the area of the assembly opening that extends through the panel outer layer (revealing an open honeycomb cell or layer), before further flight, replace the bearing with an airworthy bearing and repair the floor.

(2) After performing the actions in (e)(1)(i) through (iii) of this AD, before further flight, install a Teflon strip and identify the floor by following the Accomplishment Instructions, paragraphs 3.E.(1) through 3.E.(4), of the ASB.

(3) Within 100 hours TIS, modify and re-identify the rod as depicted in Figure 1 of the ASB and by following the Accomplishment Instructions, paragraphs 3.H.(1) through 3.H.(3)(f), of the ASB.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email [matthew.fuller@faa.gov](mailto:matthew.fuller@faa.gov).

(2) For operations conducted under 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

The subject of this AD is addressed in European Aviation Safety Agency AD No. 2006-0318 R1, dated October 27, 2006, which you may view on the internet at <http://www.regulations.gov> in the AD docket.

**(h) Subject**

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

**(i) Material Incorporated by Reference**

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

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

(i) Eurocopter Alert Service Bulletin No. EC135-67A-012, Revision 1, dated October 18, 2006.

(ii) Reserved.

(3) For Eurocopter service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, TX 75052, telephone (972) 641-0000 or (800) 232-0323, fax (972) 641-3775, or at <http://www.eurocopter.com/techpub>.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on September 27, 2013.

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



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**2013-22-01 Bell Helicopter Textron Canada:** Amendment 39-17633; Docket No. FAA-2013-0526; Directorate Identifier 2008-SW-14-AD.

**(a) Applicability**

This AD applies to Model 206L-4 and 407 helicopters, with a freewheel aft bearing cap (cap), part number (P/N) 406-040-509-101, with a serial number with a prefix of "A-" and Nos. 1833 through 1912, installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as certain caps being manufactured without a lubrication channel to allow oil flow into the aft bearing support assembly, which could result in failure of the freewheel unit and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective December 5, 2013.

**(d) Compliance**

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

**(e) Required Actions**

Within 50 hours time-in-service (TIS):

- (1) Remove and disassemble each freewheel assembly.
- (2) Replace the sprag and retainer (item 7), the output shaft (item 10), and the aft seal (item 3), as depicted in Figure 2 of Bell Alert Service Bulletin (ASB) No. 206L-04-129 for the Model 206L-4 and ASB No. 407-04-66 for the Model 407, both Revision A, and both dated December 1, 2004.
- (3) Visually inspect the remaining freewheel part details for a missing channel.
- (4) If the channel is missing, replace or rework the cap assembly by following the instructions depicted in Figure 3 of ASB 206L-04-129 or ASB 407 04-66, as applicable for your model helicopter. Using a vibrating stylus, mark the letter "R" at the end of the serial number on the cap assembly.

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

- (1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Eric Haight, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, Fort Worth, Texas 76137, telephone (817) 222-5110, email: [eric.haight@faa.gov](mailto:eric.haight@faa.gov).
- (2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, we suggest that you notify your principal inspector, or lacking a principal inspector,

the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

**(g) Additional Information**

The subject of this AD is addressed in Transport Canada Civil Aviation (TCCA) AD No. CF-2004-17R1, dated February 11, 2005. You may view the TCCA AD at <http://www.regulations.gov> in Docket No. FAA-2013-0526.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 6300: Main Rotor Drive System.

**(i) Material Incorporated by Reference**

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

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

(i) Bell Alert Service Bulletin (ASB) No. 206L-04-129, Revision A, dated December 1, 2004.

(ii) Bell ASB No. 407-04-66, Revision A, dated December 1, 2004.

(3) For Bell service information identified in this AD, contact Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, Texas 76101, telephone (817) 280-3391, fax (817) 280-6466.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on October 1, 2013.

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