

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

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

BIWEEKLY 2012-24

11/19/2012 - 12/2/2012



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

Email: rgl@faa.gov

CHANGE OF ADDRESS NOTICE

Any change of address regarding the biweekly service must include the mailing label from a recent issue or your name and address printed exactly as they appear on the mailing label (including the computer number above the address).

Please allow one month for an address change.

MAIL YOUR ADDRESS CHANGE TO:

Superintendent of Documents
Government Printing Office
Mail List Branch SSOM
Washington, DC 20402

Telephone: (202) 512-1806
Facsimile: (202) 512-2250

SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

Information Key: E - Emergency; COR - Correction; S - Supersedes

Biweekly 2012-01

2010-19-06 R1	COR	Turbomeca	Engine: Arriel 1A, 1A1, 1B, 1C, 1C1, 1C2, 1D, 1D1, and IS1 turboshaft
2011-26-10		Enstrom Helicopter Corporation	Rotorcraft: F-28C, F-28C-2, F-28F, 280C, 280F, 280FX, TH-28, 480, and 480B
2011-27-09		Socata	TBM 700
2012-01-01		Various Aircraft	See AD
2012-01-02		Schempp-Hirth Flugzeugbau	Glider: Discus 2cT

Biweekly 2012-02

2011-18-12	S 82-13-05R1	Eurocopter France	Rotorcraft: AS350B, B1, B2, B3, BA, and D; and AS355E, F, F1, F2, and N
2011-27-08		Agusta S.p.A.	Rotorcraft: A109S and AW109SP
2011-27-51		Hawker Beechcraft	1900, 1900C, 1900C (Military), 1900D
2012-01-07		BRP-Powertrain GmbH	Engine: Rotax 914 F2, 914 F3, and 914 F4 reciprocating
2012-01-11		Cirrus Design	SR22T
2012-02-05		Thielert Aircraft Engines GmbH	Engine: TAE 125-02-99 and TAE-125-02-114 reciprocating

Biweekly 2012-03

71-13-01R1		Lycoming Engines	Engine: TIO-540-A series
2012-01-03		Eurocopter France	Rotorcraft: AS332L2 and EC225LP
2012-02-02	S 2008-03-02	Cessna	172R and 172S
2012-02-06		Honeywell International	Engine: TPE331-10, -10AV, -10GP, -10GT, -10N, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, and TPE331-11U
2012-02-10	S 2011-07-13	CPAC	112, 112B, 112TC, 112TCA, 114, 114A, 114B, and 114TC
2012-02-13		Eurocopter France	Rotorcraft: EC130B4
2012-02-51	E	Bell Helicopter Textron Canada Limited	Rotorcraft: 206L, L-1, L-3, and L-4
2012-03-06	S 2011-15-10	Superior Air Parts, Lycoming Engines, and Continental Motors	Engine: Fuel injected reciprocating engines
2012-03-52	E	Mooney Aviation	M20TN and M20R

Biweekly 2012-04

2012-03-01		Eurocopter Deutschland	Rotorcraft: EC135 helicopters
2012-03-07		Lycoming Engines	Engine: See AD
2012-03-11	S 2010-03-06	Turbomeca S.A.	Engine: Arriel 2B and 2B1 turboshaft engines

Biweekly 2012-05

2010-11-09R1	R	Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99 reciprocating engines
2011-12-10	COR	Robinson Helicopter Company	R22, R22 Alpha, R22 Beta, and R22 Mariner helicopters; R44 and R44 II helicopters
2011-27-04	COR	Hawker Beechcraft Corporation	95-C55, D55, E55, 58, and 58A airplanes
2012-03-52		Mooney	M20R and M20TN airplanes
2012-04-03		BRP-Powertrain GmbH & Co. KG	912 S2 and 912 S3 reciprocating engines; 914 F2 reciprocating engines

Biweekly 2012-06

2012-04-10		Burl A. Rogers	15AC and S15AC airplanes
2012-05-01		Eurocopter France	SA-365C, SA-365C1, SA-365C2, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1 helicopters
2012-05-09	S 2012-03-52	Mooney Aviation	M20B, M20C, M20D, M20E, M20F, M20G, M20J, M20K, M20L, M20M, M20R, M20S, and M20TN airplanes

SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
--------	-------------	--------------	---------------

Information Key: E - Emergency; COR - Correction; S - Supersedes

Biweekly 2012-07

2012-06-13		DG Flugzeugbau GmbH	Gliders: DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, DG-500/22 Elan, DG-500M, and DG-500MB PC-6, PC-6-HI, PC-6-H2, PC-6/350, PC-6/350-HI, PC-6/350-H2, PC-6/A, PC-6/A-HI, PC-6/A-H2, PC-6/B-H2, PC-6/BI-H2, PC-6/B2-H2, PC-6/B2-H4, PC-6/C-H2, and PC-6/CI-H2 Rotorcraft: AB412
2012-06-16		Pilatus Aircraft	
2012-07-01		Agusta S.p.A.	

Biweekly 2012-08

2011-18-52		Agusta S.p.A.	AB139 and AW139 helicopters
2012-02-51		Bell Helicopter Textron Canada Limited	206L, 206L-1, 206L-3, and 206L-4 helicopters
2012-06-15		DG Flugzeugbau GmbH	DG-500 Elan Orion, DG-500 Elan Trainer, DG-500/20 Elan, and DG-500/22 Elan sailplanes, DG-500M and DG-500MB powered sailplanes
2012-06-24	S 2009-14-11	Sikorsky	S-92A helicopters
2012-07-09		Turbomeca S.A.	Arrius 2F turboshaft engines
2012-08-01		Sikorsky	S-92A helicopters

Biweekly 2012-09

2012-08-18		Turbomeca	Arriel 2B and 2B1 turboshaft engines
------------	--	-----------	--------------------------------------

Biweekly 2012-10

2012-10-02		Hawker Beechcraft	58, G58
2012-10-51	E	Eurocopter Deutschland GmbH	EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, and EC135 T2+ helicopters
2012-10-52	E	Hartzell Engine Technologies	Appliance: Turbocharger HET P/N 406610-0005 or P/N 406610-9005, P/N 406610-0005 or P/N 406610-9005, P/N 409836-0005
2012-10-53	E S 2012-10-51	Eurocopter Deutschland GmbH	EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, and EC135 T2+ helicopters

Biweekly 2012-11

2012-10-01		Bell Helicopter Textron Canada Limited	427
2012-10-04		Cessna Aircraft Company	210G, T210G, 210H, T210H, 210J, T210J, 210K, T210K, 210L, T210L, 210M, T210M, 210N, T210N, P210N, 210R, T210R, P210R
2012-10-09	S 80-11-06	Piper Aircraft Inc	PA-31T, PA-31T1
2012-10-13	S 2011-25-51	Continental Motors Inc	TSIO-520-B, BB, D, DB, E, EB, J, JB, K, KB, N, NB, UB, VB; TSIO-550-K; TSIOF-550-K; IO-550-N

Biweekly 2012-12

2012-09-10		Pratt & Whitney Canada	PT6A-38, -41, -42, -42A, -61, -64, -66, -66B, -110, -112, -114, -114A, -121, -135, and -135A series turboprop engines
2012-09-11		Eurocopter Deutschland GMBH	MBB-BK 117 C-1 and C-2 helicopters
2012-10-11		Burkhart GROB Luft- und Raumfahrt GmbH	GROB G 109 and GROB G 109B powered sailplanes
2012-10-52		Hartzell Engine Technologies	Appliance: See AD
2012-11-08		WACO Classic Aircraft Corporation	2T-1A, 2T-1A-1, 2T-1A-2:
2012-11-10		Alpha Aviation Concept Limited	R2160

Biweekly 2012-13

2012-10-14		SOCATA	TBM 700
2012-11-02		Eurocopter Deutschland	EC135 helicopters
2012-11-05		Enstrom	F-28C, F-28C-2, F-28F, 280C, 280F, 280FX, TH-28, 480, and 480B helicopters
2012-11-12		Agusta	AW139 helicopters
2012-11-13		Aeronautical Accessories	See AD
2012-12-10		Agusta	AB139 and AW139 helicopters
2012-12-11		Bell Canada	206, 206A, 206A-1, 206B, 206B-1, 206L, 206L-1, 206L-3,

SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
			and 206L-4 helicopters
2012-12-20		Turbomeca	Arriel 2C1, 2C2, and 2S2 turboshaft engines
2012-12-21		Eurocopter Deutschland	MBB-BK 117 C-2 helicopters
Biweekly 2012-14			
2012-13-04		Embraer	EMB-505
2012-14-06		Rolls-Royce Corporation	250-C20, -C20B, and -C20R/2 turboshaft engines
Biweekly 2012-15			
2012-13-10		PZL Swidnik S.A.	PZL W-3A helicopters
2012-13-11		Eurocopter Deutschland GmbH	MBB-BK 117 A-1, MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK 117 B-1, MBB-BK 117 B-2, MBB-BK 117 C-1, MBB-BK 117 C-2, and BO-105LS A-3 helicopters
2012-14-07	S 2011-15-51	Bell Helicopter Textron Canada	407 and 427 helicopters
2012-14-08		Sikorsky Aircraft	S-92A helicopters
2012-14-10		Boeing Vertol	107-II helicopters
		Kawasaki Heavy Industries	KV107-II and KV107-IIA helicopters
2012-14-11		See AD	OH-58A, OH-58A+, and OH-58C helicopters
2012-14-14		Eurocopter Deutschland GmbH	MBB-BK 117 A-3, MBB-BK 117 A-4, MBB-BK B-1, MBB-BK 117 B-2, and MBB-BK 117 C-1 helicopters
2012-14-15		Honeywell International	Appliance: KGS200 Mercury ²
2012-15-04		Eurocopter France	EC155B1 helicopters
Biweekly 2012-16			
2012-14-12		See AD	See AD
2012-15-01		See AD	See AD
2012-15-07		Glasflugel	Club Libelle, Kestrel, Mosquito, Standard Libelle-201B gliders
2012-16-03		HPH s. r.o.	304C, 304CZ, and 304CZ-17 sailplanes
Biweekly 2012-17			
2012-12-21	COR	Eurocopter Deutschland	MBB-BK 117 C-2 helicopters
2012-15-08		Sikorsky	S-76A helicopters
2012-16-02		Eurocopter France	EC155B and EC155B1 helicopters
2012-16-13		BRP-Powertrain	Rotax 912 F2; 912 F3; 912 F4; 912 S2; 912 S3; and 912 S4 reciprocating engines
Biweekly 2012-18			
2012-08-06	S 52-02-02	Univair Aircraft Corporation	(ERCO) 415-C, 415-CD, 415-D, E, G; (Forney) F-1 and F-1A; (Alon) A-2 and A2-A; and (Mooney) M10
2012-16-14		Honeywell International Inc.	TFE731-20R, -20AR, -20BR, -40, -40AR, -40R, -50R, and -60 turbofan engines
2012-17-02		Eurocopter France	SA-365N, SA-365N1, SA-366G1, AS-365N2, AS 365 N3, EC 155B, and EC155B1 helicopters
2012-17-03		Eurocopter France	AS350B, AS350BA, AS350D, AS350B1, AS350B2, and AS350B3 helicopters
2012-17-05		Honeywell International Inc.	TFE731-5, TFE731-5AR and -5BR series, TFE731-4, -4R, -5AR, -5BR, and -5R series turbofan engines
2012-17-07		Diamond Aircraft Industries GmbH	DA 42, DA 42 NG, and DA 42 M-NG
2012-18-01		M7 Aerospace LLC	SA226-AT, SA226-T, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), SA227-AT, and SA227-TT
Biweekly 2012-19			
2012-15-07 R1		Glasflugel	Club Libelle 205, Kestrel, Mosquito, Standard Libelle-201B
2012-17-06		Piper	PA-24, PA-24-250, PA-24-260
2012-17-09		Eurocopter France	
2012-17-10		Various Restricted Category Helicopters	HH-1K, TH-1F, TH-1L, UH-1A, UH-1B, UH-1E, UH-1F, UH-1H, UH-1L, and UH-1P helicopters
2012-18-02		Agusta	AB412 and AB412EP helicopters
2012-18-04		Costruzioni Aeronautiche	P2006T airplanes
2012-18-06		Piaggio	P-180 airplanes

SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S - Supersedes			
2012-18-08		Eurocopter France	SA330F, SA330G, SA330J, AS332C, AS332L, AS332L1, and AS332L2 helicopters
2012-18-09		Bell Helicopter Textron Canada	407 helicopters
2012-18-10		GA200 (Pty) Ltd	GA200 and GA200C airplanes
2012-18-18		Turbomeca	Arriel 2B, 2B1, 2S2, and 2C2 turboshaft engines
2012-19-01		Lycoming Engines	(L)O-360, (L)IO-360, AEIO-360, IO-390, AEIO-390, O-540, IO-540, AEIO-540, (L)TIO-540, IO-580, AEIO-580, and IO-720 series reciprocating engines
Biweekly 2012-20			
2012-19-09		Eurocopter France	EC 155B, EC155B1, SA-365N1, AS-365N2 and AS 365 N3 helicopters
2012-20-02		Alpha Aviation Concept Limited	R2160
Biweekly 2012-21			
2000-07-11 R1		Piaggio Aero Industries S.p.A.	P-180
2012-21-51	E	Eurocopter France	AS350B3 helicopters
Biweekly 2012-22			
2012-21-01	S 2011-14-05	MD Helicopters, Inc.	MD900 helicopters
2012-21-05		Hawker Beechcraft	G58
2012-21-06		Hawker Beechcraft	C90GTi (King Air)
2012-21-07		Agusta	A109S helicopters
2012-21-09		Eurocopter France	EC225 LP helicopters
2012-21-52	E	Agusta S.p.A.	AW139 helicopters
Biweekly 2012-23			
2003-17-03 R1	R 2003-17-03	Piaggio Aero Industries S.p.A.	P-180
2012-08-06	S 52-02-02	Univair Aircraft Corporation	(ERCO) 415-C, 415-CD, 415-D, E, G; (Forney) F-1 and F-1A; (Alon) A-2 and A2-A; and (Mooney) M10
2012-16-13		BRP-Powertrain GmbH & Co KG	Rotax 912 F2; 912 F3; 912 F4; 912 S2; 912 S3; and 912 S4 reciprocating engines
2012-22-06		Aeronautical Accessories, Inc.	Appliance: See Ad
2012-22-09		Sikorsky Aircraft Corporation	S-92A helicopters
2012-22-11		Bell Helicopter Textron	412, 412EP AND 412CF helicopters
2012-22-13		Sikorsky Aircraft Corporation	S-76C helicopters
2012-22-14		Sikorsky Aircraft Corporation	S-70, S-70A, S-70C, S-70C(M), and S-70C(M1) helicopters
Biweekly 2012-24			
2012-10-53		Eurocopter Deutschland GMBH	EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, and EC135 T2+ helicopters
2012-22-01		Cessna	172R and 172S
2012-23-01		Cessna	402C and 414A
2012-23-03		Eurocopter France	SA.315B Alouette III, SE.3160 Alouette III, SA.316B Alouette III, SA.316C Alouette III, SA.319B Alouette III, SA 3180-ALOUETTE ASTAZOU, SA 318B-ALOUETTE ASTAZOU, and SA 318 C-ALOUETTE ASTAZOU helicopters
2012-23-05		Eurocopter Deutschland GMBH	MBB-BK117 C-2 helicopters
2012-23-13		Sikorsky	S-70, S-70A, and S-70C helicopters



2012-10-53 Eurocopter Deutschland GMBH (ECD): Amendment 39-17254; Docket No. FAA-2012-1188; Directorate Identifier 2012-SW-049-AD.

(a) Applicability

This AD applies to Model EC135 P1, EC135 P2, EC135 P2+, EC135 T1, EC135 T2, and EC135 T2+ helicopters, with a main rotor hub (MRH) shaft, part number (P/N) L623M1006101, L623M1206101, L623M1006102, L623M1206102, L623M1006103, or L623M1206103 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in the MRH shaft flange, which could result in failure of the MRH shaft and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective December 5, 2012 to all persons except those persons to whom it was made immediately effective by Emergency AD No. 2012-10-53, issued on May 18, 2012, which contained the requirements of this AD.

(d) Other Affected ADs

This AD supersedes Emergency AD No. 2012-10-51, dated May 15, 2012.

(e) Compliance

You are responsible for performing each action required by this AD within the specified compliance time.

(f) Required Actions

(1) Before further flight, and thereafter at intervals not to exceed 6 hours time-in-service (TIS), check the MRH shaft lower flange and the visible area of the MRH shaft upper flange for a crack. Figures 1 and 2 to Paragraph (f)(1) of this AD are examples of cracks that have been discovered in the MRH shaft lower flange. The actions required by this paragraph may be performed by the owner/operator (pilot) holding at least a private pilot certificate, and must be entered into the aircraft 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.

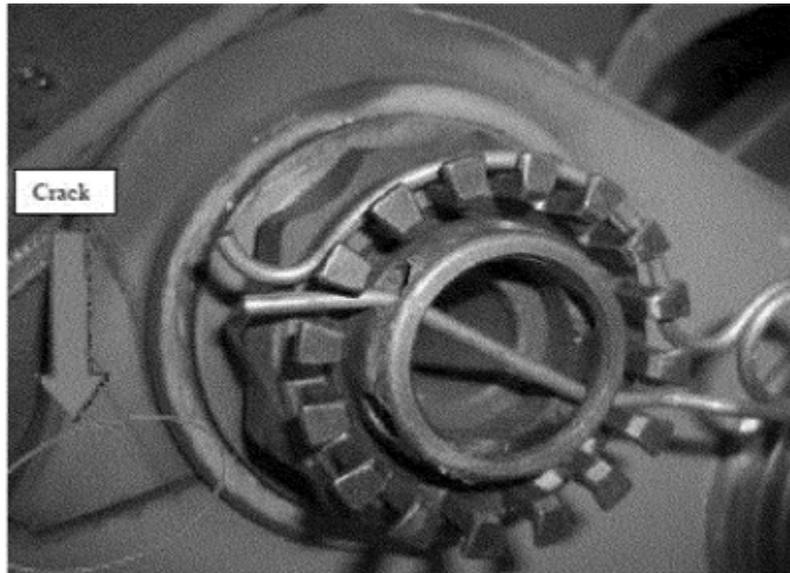


Figure 1 to Paragraph (f)(1)

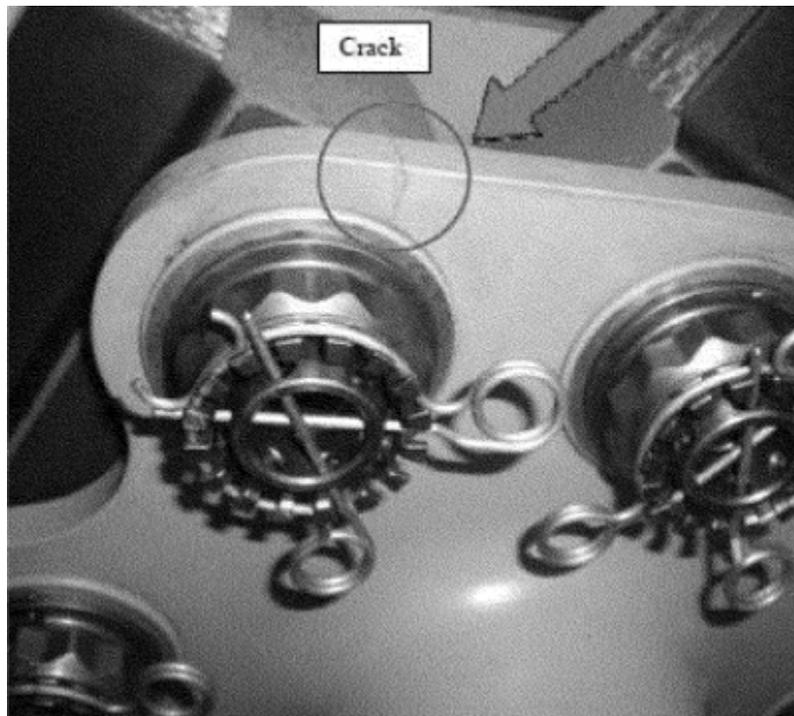
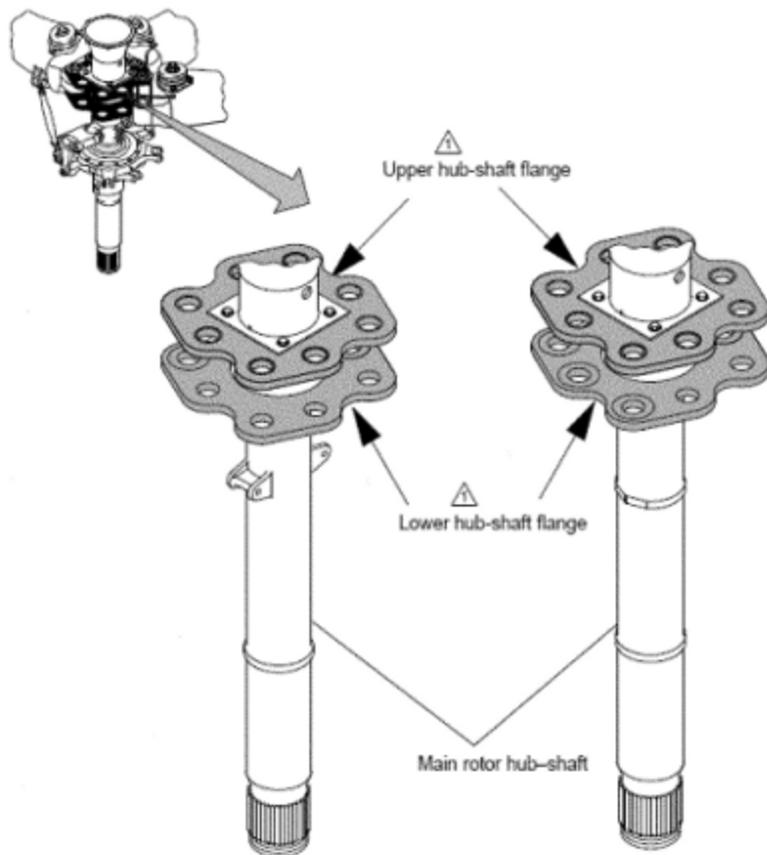


Figure 2 to Paragraph (f)(1)

- (2) For MRH shafts with 400 or more hours TIS, within 10 hours TIS, and thereafter at intervals not to exceed 10 hours TIS:
- (i) Remove rotor-hub cap.
 - (ii) Clean the upper and lower MRH shaft flange as depicted in Figure 3 to Paragraph (f)(2)(ii) of this AD and visually inspect for a crack.



⚠ Check visible area of the upper and lower hub-shaft flange.

Figure 3 to Paragraph (f)(2)(ii)

- (iii) Remove the safety pins and nut from each blade bolt and the washers from the lower MRH shaft flange.
- (iv) Clean the blade bolt attachment area.

(v) Using a 10X or higher power magnification, inspect all lower MRH shaft flange blade bolt attachment areas for a crack as shown in Figure 4 to Paragraph (f)(2)(v) of this AD.

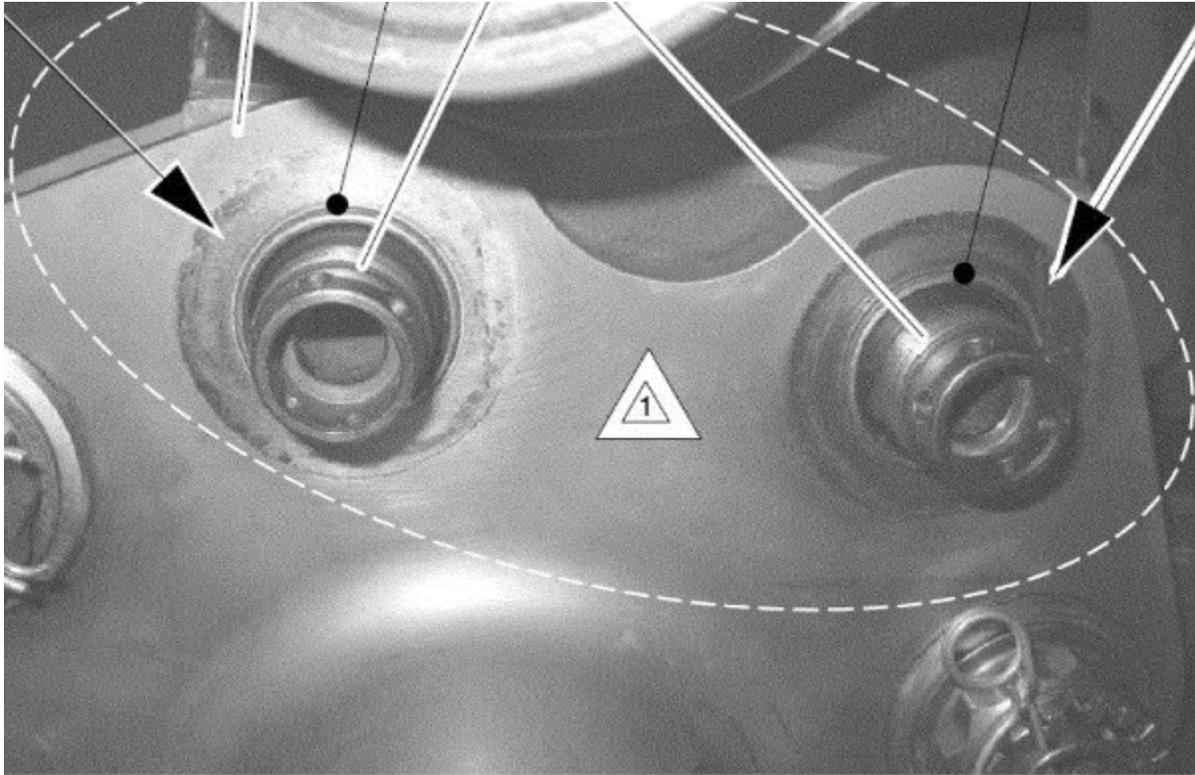


Figure 4 to Paragraph (f)(2)(v)

(3) If there is a crack in the upper or lower MRH shaft flange, before further flight, replace the MRH shaft. Replacing the MRH shaft with an MRH shaft having a part number listed in the applicability of this AD does not constitute terminating action for the requirements of this AD.

(g) 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, Texas 76137; telephone (817) 222-5110; email 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.

(h) Additional Information

(1) Eurocopter Emergency Alert Service Bulletin EC135-62A-029, Revision 2, dated May 17, 2012, which is not incorporated by reference, contains additional information about the subject of this AD. For service information identified in this AD, contact American Eurocopter Corporation, 2701 N. Forum Drive, Grand Prairie, Texas 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.eurocopter.com/techpub>. 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.

(2) The subject of this AD is addressed in European Aviation Safety Agency AD No. 2012-0085-E, dated May 17, 2012.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6220, Main Rotor Head.

Issued in Fort Worth, Texas, on October 30, 2012.

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



2012-22-01 Cessna Aircraft Company: Amendment 39-17237; Docket No. FAA-2012-0846; Directorate Identifier 2012-CE-021-AD.

(a) Effective Date

This AD is effective December 28, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to the following Cessna Aircraft Company (Cessna) airplanes, certificated in any category:

(1) Model 172R, serial numbers (S/N) 17280001 through 17281187, that have incorporated Cessna Aircraft Company Service Bulletin SB04-28-03, dated August 30, 2004, and Engine Fuel Return System, Modification Kit MK172-28-01, dated August 30, 2004; and

(2) Model 172S, S/N 172S8001 through 172S9490, that have incorporated Cessna Aircraft Company Service Bulletin SB04-28-03, dated August 30, 2004, and Engine Fuel Return System, Modification Kit MK172-28-01; dated August 30, 2004.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2820, Aircraft Fuel Distribution System.

(e) Unsafe Condition

This AD was prompted by reports of chafed fuel return line assemblies caused by the fuel return line assembly rubbing against the right steering tube assembly during full rudder pedal actuation. We are issuing this AD to correct the unsafe condition on these products.

(f) Compliance

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

(g) Inspect the Fuel Return Line Assembly

At whichever of the following that occurs later, inspect the fuel return line assembly (Cessna part number (P/N) 0500118-49) for chafing following Cessna Service Bulletin SB07-28-01, Revision 1, dated September 22, 2011.

(1) At the next annual inspection after December 28, 2012 (the effective date of this AD); or

(2) Within the next 100 hours time-in-service (TIS) after December 28, 2012 (the effective date of this AD); or

(3) Within the next 12 calendar months after December 28, 2012 (the effective date of this AD).

(h) Replace the Fuel Line Assembly

If you find evidence of chafing of the fuel return line assembly (Cessna P/N 0500118-49) as a result of the inspection required by paragraph (g) of this AD, then before further flight, replace the fuel return line assembly (Cessna P/N 0500118-49) following Cessna Service Bulletin SB07-28-01, Revision 1, dated September 22, 2011.

(i) Inspect for a Minimum Clearance Between Certain Parts

After any inspection required by paragraph (g) of this AD and no chafing of the fuel return line assembly (Cessna P/N 0500118-49) is found or after replacement of the fuel return line assembly (Cessna P/N 0500118-49) required by paragraph (h) of this AD, before further flight, inspect for a minimum clearance between the following parts throughout the range of copilot pedal travel:

- (1) A minimum clearance of 0.5 inch between the fuel return line assembly (Cessna P/N 0500118-49) and the right steering tube assembly (Cessna P/N MC0543022-2C); and
- (2) Visible positive clearance between the fuel return line assembly (Cessna P/N 0500118-49) and the airplane structure.

(j) Adjust Clearance for Fuel Return Line Assembly

If the clearance between the fuel return line assembly and the right steering tube assembly and the clearance between the fuel return line assembly and the aircraft structure do not meet the minimums as specified in paragraphs (i)(1) and (i)(2) of this AD, before further flight, adjust the clearances to meet the required minimums following the Instructions paragraph of Cessna Service Bulletin SB07-28-01, Revision 1, dated September 22, 2011.

(k) Engine Fuel Return System Modification

Do not incorporate Cessna Aircraft Company Engine Fuel Return System Modification Kit MK 172-28-01 as referenced in Service Bulletin SB 04-28-03, both dated August 30, 2004, without performing the actions in this AD before further flight after installation.

(l) Alternative Methods of Compliance (AMOCs)

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

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

(m) Related Information

For more information about this AD, contact Jeff Janusz, Aerospace Engineer, Wichita ACO, FAA, 1801 S. Airport Road, Room 100, Wichita, Kansas 67209; phone: (316) 946-4148; fax: (316) 946-4107; email: jeff.janusz@faa.gov.

(n) 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 March 13, 2012 (77 FR 6003, February 7, 2012).

(i) Cessna Aircraft Company Cessna Service Bulletin SB07-28-01, Revision 1, dated September 22, 2011.

(ii) Reserved.

(4) For Cessna Aircraft Company service information identified in this AD, contact Cessna Aircraft Company, Customer service, P.O. Box 7706, Wichita, KS 67277; telephone: (316) 517-5800; fax: (316) 517-7271; Internet: <http://www.cessnasupport.com>.

(5) You may view this service information at FAA, Small Airplane Directorate, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(6) 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 Kansas City, Missouri, on October 22, 2012.

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



2012-23-01 Cessna Aircraft Company: Amendment 39-17257; Docket No. FAA-2010-1084; Directorate Identifier 2010-CE-056-AD.

(a) Effective Date

This AD is effective December 26, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Cessna Aircraft Company (Cessna) Model 402C airplanes modified by Supplemental Type Certificate (STC) SA927NW and Model 414A airplanes modified by STC SA892NW, all serial numbers, that are certificated in any category.

(d) Subject

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

(e) Unsafe Condition

This AD was prompted by a report of a Cessna Model 414A airplane modified by STC SA892NW that experienced an asymmetrical flap condition causing an uncommanded roll when the pilot set the flaps to the approach position. We are issuing this AD to prevent failure of the flap system, which could result in an asymmetrical flap condition. This condition could result in loss of control.

(f) Compliance

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

(g) Inspection of the Flap Control System

Within 60 days after December 26, 2012 (the effective date of this AD), do a complete inspection of the flap control system following the Inspection Instructions section of Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

(h) Modification of the Flap Control System

(1) If any damage to the flap bellcrank or bellcrank mounting structure is found in the inspection required in paragraph (g) of this AD, before further flight, repair the damage and modify the flap

control system following the Accomplishment Instructions of Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

(2) If no damage to the flap bellcrank or bellcrank mounting structure is found in the inspection required in paragraph (g) of this AD, within 180 days after December 26, 2012 (the effective date of this AD), modify the flap control system following the Accomplishment Instructions of Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

(i) Instructions for Continued Airworthiness

Within 7 months after December 26, 2012 (the effective date of this AD), or during your next annual inspection, whichever occurs earlier, incorporate Sierra Industries, Ltd. Instructions for Continued Airworthiness, 82-1, Issue 1, dated June 12, 2012, into your FAA-approved maintenance program.

(j) Alternative Methods of Compliance (AMOCs)

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

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

(k) Related Information

(1) For more information about this AD, contact Michael A. Heusser, Program Manager, Fort Worth ACO, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; phone: (817) 222-5038; fax: (817) 222-5160; email: michael.a.heusser@faa.gov.

(2) For service information identified in this AD, contact Sierra Industries, Ltd., 122 Howard Langford Drive, Uvalde, Texas 78801; telephone: 888-835-9377; email: chip@sijet.com; Internet: <http://www.sijet.com/r-stol-high>. You may review copies of the 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.

(l) 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 the service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Sierra Industries, Ltd. Service Bulletin SI09-82 Series-1, Rev. A, dated June 12, 2012.

(ii) Sierra Industries, Ltd. Instructions for Continued Airworthiness, 82-1, Issue 1, dated June 12, 2012.

(3) For Sierra Industries, Ltd. service information identified in this AD, contact Sierra Industries, Ltd., 122 Howard Langford Drive, Uvalde, Texas 78801; telephone: 888-835-9377; email: chip@sijet.com; Internet: <http://www.sijet.com/r-stol-high>.

(4) You may view this service information at 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.

(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 Kansas City, Missouri, on November 5, 2012.
Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.



2012-23-03 Eurocopter France Helicopters: Amendment 39-17259; Docket No. FAA-2012-0339; Directorate Identifier 2011-SW-051-AD.

(a) Applicability

This AD applies to Model SA.315B Alouette III, SE.3160 Alouette III, SA.316B Alouette III, SA.316C Alouette III, SA.319B Alouette III, SA 3180-ALOUETTE ASTAZOU, SA 318B-ALOUETTE ASTAZOU, and SA 318 C-ALOUETTE ASTAZOU helicopters with a free-wheel cage, part number (P/N) 3130S60-10-003 installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as incorrect positioning of the roller drive pocket recesses on the cage of the tail-rotor driveshaft free-wheel assembly. This condition could result in loss of tail rotor drive and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective December 31, 2012.

(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 110 hours time-in-service:

- (1) Remove the free-wheel assembly and pull out the free-wheel driven head.
- (2) Inspect the free-wheel cage for correct alignment of the roller drive pocket recesses in accordance with Figure 2 of Eurocopter Alert Service Bulletin (ASB) No. SA315-65.48, Revision 0, or Eurocopter ASB No. ALOUETTE-65.149, Revision 0, both dated March 23, 2011, as appropriate for your model helicopter.
- (3) If the right edge of the tab is in line with the right edge of the pocket recess, before further flight, replace the free-wheel cage with an airworthy free-wheel cage.
- (4) Do not install an affected free-wheel assembly on any helicopter, unless the cage has passed inspection in accordance with paragraph (e)(2) through (e)(3) of this AD.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Rao Edupuganti, Aerospace Engineer, FAA, Rotorcraft Directorate, Regulations and Policy Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5110, email rao.edupuganti@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 European Aviation Safety Agency (EASA) AD No. 2011-0143, dated July 26, 2011.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 6700: Tail Rotor Drive System.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the following service information 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 (ASB) No. SA315-65.48, Revision 0, dated March 23, 2011.

(ii) Eurocopter ASB No. ALOUETTE-65-149, Revision 0, dated March 23, 2011.

(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 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 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 November 5, 2012.

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



2012-23-05 Eurocopter Deutschland GMBH: Amendment 39-17261; Docket No. FAA-2012-0528; Directorate Identifier 2011-SW-068-AD.

(a) Applicability

This AD applies to Model MBB-BK117 C-2 helicopters with a generator control unit (GCU), part number (P/N) 51530-021EI with no modification (MOD), MOD A, or MOD B installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as an internal short circuit in certain GCUs. This condition could result in loss of electrical generating power, resulting in the loss of systems required for continued safe flight and landing, and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective December 26, 2012.

(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 the next 300 hours time-in-service or 6 months, whichever occurs first, replace all GCUs with no MOD, MOD A, or MOD B with an airworthy GCU.

(2) Do not install a GCU P/N 51530-021-EI with no MOD, MOD A, or MOD B on any helicopter.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: George Schwab, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5114; email george.schwab@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) Eurocopter Deutschland GmbH Alert Service Bulletin MBB-BK117 C-2-24A-010 Revision 2, dated September 14, 2011, which is not incorporated by reference, contains additional information about the subject of this AD.

(2) For 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>. 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.

(3) The subject of this AD is addressed in European Aviation Safety Agency AD No. 2011-0149R1, dated September 30, 2011.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 2436: DC Generator Control Unit.

Issued in Fort Worth, Texas, on October 30, 2012.

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



2012-23-13 Sikorsky Aircraft Corporation: Amendment 39-17269; Docket No. FAA-2012-1206; Directorate Identifier 2012-SW-021-AD.

(a) Applicability

This AD applies to Model S-70, S-70A, and S-70C helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as fatigue failure of a main rotor blade, tail rotor blade, planetary carrier assembly, tail rotor servo, elastomeric sleeve bearing, main landing gear shock strut piston cylinder, crossfeed valve, oil cooler axial fan ball bearing assembly, dowel pin, main rotor hub, or right tie attach bolt remaining in service beyond its life limit. This condition could result in loss of control of the helicopter.

(c) Effective Date

This AD becomes effective December 14, 2012.

(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 Action

Before further flight:

(1) Establish or reduce the retirement life of the following parts listed in Table 1-1 of the Sikorsky Technical Manual TM 1-70-23AW-2, change 3, section 1.1, Airworthiness Limitations, by inserting a copy of Table 1-1 into the Airworthiness Limitations section of TM 1-70-23AW-2 or by making the following pen and ink changes to the Airworthiness Limitations of the maintenance manual:

(i) For each dowel pin on the main transmission housing, part number (P/N) NAS607-10-12P, NAS607-12-14P, and NAS607-12-18P, establish a life limit of 3,000 hours time-in-service (TIS).

(ii) For elastomeric sleeve bearing, P/N SB5203-202, establish a life limit of 720 hours TIS.

(iii) For right tie rod attach bolt, P/N SS5025-04H010, establish a life limit of 3,500 hours TIS.

(iv) For right tie rod attach bolt, P/N SS5025-04H10, establish a life limit of 5,000 hours TIS.

(v) For oil cooler axial fan ball bearing, P/N 210SFFC, installed in oil cooler axial fans, P/N 70361-03005-103 through -106, establish a life limit of 2,000 hours TIS; and for bearings installed in oil cooler axial fan, P/N 70361-03005-107, establish a life limit of 2,500 hours TIS.

(vi) For oil cooler axial fan ball bearing, P/N 210SFFC-0129, installed in oil cooler axial fan, 70361-03005-103 through -106, establish a life limit of 2,000 hours TIS; and for bearings installed in oil cooler axial fan, P/N 70361-03005-107, establish a life limit of 2,500 hours TIS.

(vii) For main rotor hub, P/N 70070-10046-055, establish a life limit of 5,100 hours TIS.

(viii) For main rotor blade, P/N 70080-15001-041, establish a life limit of 5,000 hours TIS.

(ix) For tail rotor blade, P/N 70080-15002-041, establish a life limit of 5,000 hours TIS.

(x) For main rotor blade, P/N 70080-15003-041, establish a life limit of 5,000 hours TIS.

(xi) For tail rotor blades, P/N 70080-15004-041 and P/N 70080-15005-041, establish a life limit of 5,000 hours TIS.

(xii) For main landing gear shock strut piston assembly, P/N 70250-12067-102, establish a life limit of 9,000 hours TIS.

(xiii) For Number 2 crossfeed breakaway valve, P/N 70307-03600-103, establish a life limit of 1,500 hours TIS;

(xiv) For main module planetary carrier assembly, P/N 70351-08175-043, -044, and -045, establish a life limit of 1,400 hours TIS; and for P/N 70351-08175-046 establish a life limit of 12,000 hours TIS.

(xv) For dowel pins, P/N 70351-08404-101, -102, and -103 on main transmission housings, P/N 70351-08110-044 and -045, establish a life limit of 3,000 hours TIS; for dowel pins, P/N 70351-08404-101, -102, -103, and -104 on main transmission housings, P/N 70351-28110-043 and -044, establish a life limit of 7,300 hours TIS; for dowel pins, P/N 70351-08404-101, -103, and -104, on main transmission housings, P/N 70351-38110-043, -044, and -045, establish a life limit of 11,000 hours TIS.

(xvi) For dowel pin, flight control support mounting to main transmission housing, P/N 70531-04805-101, 70531-04805-102, and 70531-08405-103, establish a life limit of 3,000 hours TIS.

(xvii) For dowel pin, flight control support mounting to transmission case, P/N 70351-28404-101, on main transmission housings, P/N 70351-08110-044 and -045, reduce the life limit from 4,300 hours TIS to 3,000 hours TIS.

(xviii) For main module planetary carrier assembly, P/N 70351-38175-041, establish a life limit of 6,500 hours TIS.

(xvix) For dowel pin, flight control support mounting to transmission case, P/N 70351-38404-101, on main transmission housings, P/N 70351-38110-043, -044, and -045, reduce the life limit from 20,000 hours TIS to 11,000 hours TIS.

(xx) For the tail rotor servo, P/N 70410-06520-044, -045, and -046, establish a life limit of 15,000 hours TIS.

(2) Remove from service any part with a number of hours time-in-service equal to or greater than the part's retirement life as stated in paragraph (e)(1) of this AD.

(f) Special Flight Permit

Special flight permits to allow flight in excess of life limits will not be issued.

(g) Alternative Methods of Compliance (AMOC)

(1) The Manager, Boston Aircraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Davison, Flight Test Engineer, New England Regional Office, 12 New England Executive Park, Burlington, MA 01803; phone: (781) 238-7156; email: michael.davison@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.

(h) Subject

Joint Aircraft Service Component (JASC) Codes: 7921 Engine Oil Cooler, 6210 Main Rotor Blades, 6320 Tail Rotor Head, 6410 Tail Rotor Blades, 6720 Tail Rotor Control System, 3213 Main Landing Gear Strut/Axle/Truck, 2824 Fuel Transfer Valve, and 1430 Fasteners.

Issued in Fort Worth, Texas, on November 2, 2012.
Kim Smith,
Directorate Manager, Rotorcraft Directorate,
Aircraft Certification Service.