

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

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

**BIWEEKLY 2015-16**

*7/27/2015 - 8/9/2015*



Federal Aviation Administration  
Continued Operational Safety Policy Section, AIR-141  
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; R - Replaces

**Biweekly 2015-01**

2014-26-04		GROB-WERKE	G115EG and G120A
2014-26-05		Beechcraft Corporation	G58

**Biweekly 2015-02**

2014-26-02		Airbus Helicopters	EC155B1 and AS 365 N3 helicopters
2015-01-02		Mitsubishi Heavy Industries, Ltd.	MU-2B-30, MU-2B-35, MU-2B-36, MU-2B-36A and MU-2B-60

**Biweekly 2015-03**

2014-12-11 R1	R 2014-12-11	Sikorsky Aircraft Corporation	S-92A
2015-01-03		Pilatus Aircraft Ltd	PC-7
2015-02-01	S 2011-23-01	Technify Motors GmbH (TMG)	TAE 125-01 and TAE 125-02-99
2015-02-07		Lycoming Engines	AEIO-320-D1B; AEIO-360-A1E, -A1E6, -B1H, -H1B; AEIO-540-D4A5, -D4B5, -D4D5, -L1B5, -L1B5D, -L1D5; AEIO-580-B1A; and IO-540-K1K5
2015-02-09		Costruzioni Aeronautiche Tecnam srl	P2006T
2015-02-10		Viking Air Limited	DHC-2 Mk. I, DHC-2 Mk. II, and DHC-2 Mk. III
2015-02-15		Quest Aircraft Design, LLC	KODIAK 100
2015-02-22	S 2012-14-06	Rolls-Royce Corporation	250-B17, -B17B, -B17C, -B17D, -B17E, -B17F, -B17F/1, -B17F/2; and 250-C20, -C20B, -C20F, -C20J, -C20R, -C20R/1, -C20R/2, -C20R/4, -C20S, and -C20W
2015-02-27	S 2013-19-19	Airbus Helicopters	AS332C, AS332L, AS332L1, AS332L2, and EC225LP

**Biweekly 2015-04**

2014-22-51		Airbus Helicopters	EC130T2 helicopters
2015-02-21		Agusta S.p.A.	AB139 and AW139 helicopters
2015-04-51	E	Enstrom Helicopter Corporation	F-28A, 280, F-28C, F-28C-2, F-28C-2R, 280C, F-28F, F-28F-R, 280F, 280FX, and 480 helicopters

**Biweekly 2015-05**

2015-04-01		Short Brothers & Harland Ltd	SC-7 Series 3
2015-04-04		Bell Helicopter Textron Inc.	412 and 412EP
2015-04-05		Sikorsky Aircraft Corporation	S-76A, S-76B, S-76C, and S-76D
2015-05-51	E	Agusta S.p.A.	A109A and A109A II
2015-05-52	E	Agusta S.p.A.	A109, A109A, A109A II, A109C, A109K2, A109E, A119, A109S, AW119 MKII, and AW109SP

**Biweekly 2015-06**

2015-04-01	COR	Short Brothers & Harland Ltd	SC-7 Series 3 airplanes
2015-05-04		Bell Helicopter Textron Canada	407 helicopters
2015-05-05	S 2014-04-14	Agusta	A109S and AW109SP helicopters; A119 and AW119 MKII helicopters
2015-05-06		Flugzeugwerke Altenrhein AG	AS 202/15 "BRAVO", AS 202/18A "BRAVO", and AS 202/18A4 "BRAVO" airplanes
2015-06-01	S 2014-06-03	British Aerospace	Jetstream Series 3101 and Jetstream 3201 airplanes
2015-06-02		GA 8 Airvan	GA8-TC320 airplanes
2015-06-03		Stemme AG	S6 and S6-RT gliders

**Biweekly 2015-07**

2015-06-09		Pacific Aerospace Limited	750XL airplanes
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**Biweekly 2015-08**

2015-05-52		Agusta S.p.A.	A109, A109A, A109A II, A109C, A109K2, A109E, A119, A109S, AW119 MKII, and AW109SP
2015-07-03		Cessna Aircraft Company	402C and 414A
2015-07-04		Pilatus Aircraft Ltd.	PC-7
2015-08-51	E S 2015-04-51	The Enstrom Helicopter Corporation	F-28A, 280, F-28C, F-28C-2, F-28C-2R, 280C, F-28F, F-28F-R, 280F, and 280FX; and 480

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

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

**Biweekly 2015-09**

2014-17-08R1	R 2014-17-08	Pratt & Whitney Canada Corp. (P&WC)	PT6A-114 and PT6A-114A
2015-08-04	S 99-01-05 R1	Various Airplanes	See AD

**Biweekly 2015-10**

2015-08-07		Zodiac Aerotechnics	See Ad
2015-09-01		Airbus Helicopters	EC225LP
2015-09-04	S 2013-22-14 R1	DG Flugzeugbau GmbH	DG-1000T
2015-09-06	S 2014-26-04	GROB-WERKE	G115EG and G120A

**Biweekly 2015-11**

2015-08-51	S 2015-04-51	The Enstrom Helicopter Corporation	F-28A, 280, F-28C, F-28C-2, F-28C-2R, 280C, F-28F, F-28F-R, 280F, 280FX; 480
2015-10-05		Airbus Helicopters (previously Eurocopter France)	AS365N3, EC155B, and EC155B1
2015-10-06		Lycoming Engines	TIO-540-AJ1A
2015-10-07	S 2014-01-01	Turbomeca S.A.	Arrius 2F
2015-10-51	E	Avidyne Aerospace	Integrated Flight Displays
2015-11-01		Slingsby Aviation Ltd.	T67M260 and T67M260-T3A

**Biweekly 2015-12**

2015-11-06	S 2013-18-01	Airbus Helicopters	EC 155B, EC155B1, SA-365N, SA-365N1, AS-365N2, AS 365 N3, and SA-366G1
2015-11-07		Agusta S.p.A.	AB412 and AB412 EP
2015-11-08	S 2014-02-08	Agusta	A109C, A109S, A109K2, A109E, and AW109SP
2015-11-09		Sikorsky Aircraft Corporation	269D and 269D
2015-11-10		Sikorsky Aircraft Corporation	S-92A
2015-12-01		Airbus Helicopters	AS355E, AS355F, AS355F1, and AS355F2
2015-12-02		Bell	206L-1, 206L-3, and 206L-4

**Biweekly 2015-13**

2015-05-51		Agusta S.p.A.	A109A, A109A II
2015-10-51		Avidyne Corporation	Integrated Flight Displays (IFDs)
2015-12-04	COR R 2006-15-08	Honeywell International Inc.	TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10, -10AV, -10GP, -10GT, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR
2015-12-09		Airbus Helicopters Deutschland GmbH	EC135P1, EC135T1, EC135P2, EC135T2, EC135P2+, EC135T2+, and MBB-BK 117 C-2

**Biweekly 2015-14**

2015-13-03		Przedsiębiorstwo Doswiadczalno-Produkcyjne Szybownictwa "PZL-Bielsko"	SZD-50-3 "Puchacz"
2015-13-09		Piper Aircraft, Inc.	PA-46-350P and PA-46-500TP
2015-13-10	S 2011-17-07	M7 Aerospace LLC	SA226-T, SA226-T(B), SA226-TC, and SA226-AT
2015-13-11		Bell Helicopter Textron Canada	430

**Biweekly 2015-15**

2015-06-02 R1	R 2015-06-02	GA 8 Airvan (Pty) Ltd	TC320
2015-12-04	COR R2006-15-08	Honeywell International Inc.	TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10, -10AV, -10GP, -10GT, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR
2015-14-02		GE Aviation Czech s.r.o.	M601E-11, M601E-11A, and M601F
2015-14-04		Kaman Aerospace Corporation	K-1200
2015-14-10		Pilatus Aircraft LTD	PC-12/47 and PC-12/47E
2015-15-04		Bell Helicopter Textron, Inc.	204B, 205A, and 205A-1; and 212

**Biweekly 2015-16**

2015-12-04	COR R 2006-15-08	Honeywell International Inc.	TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10, -10AV, -10GP, -10GT, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR
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**SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS**

AD No.	Information	Manufacturer	Applicability
Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces			
2015-13-04	S 2014-19-05	Turbomeca S.A.	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, 1S1, 2B, 2B1, 2C, 2C1, 2C2, 2S1, and 2S2
2015-16-51	E	Bell Helicopter Textron Canada Limited (Bell)	429



**CORRECTION:** Federal Register Volume 80, Number 136 (Thursday, July 16, 2015); Pages 42007-42010.

**CORRECTED:** The Federal Register version of this AD incorrectly states the effective date in the regulatory portion. This copy has been corrected.

**2015-12-04 Honeywell International Inc.:** Amendment 39-18177454851; Docket No. FAA-2006-23706; Directorate Identifier 2006-NE-03-AD.

**(a) Effective Date**

This AD is effective July 22, 2015.

**(b) Affected ADs**

This AD replaces AD 2006-15-08, Amendment 39-14688 (71 FR 41121, July 20, 2006).

**(c) Applicability**

This AD applies to all Honeywell International Inc. TPE331-1, -2, -2UA, -3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10, -10AV, -10GP, -10GT, -10P, -10R, -10T, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR turboprop engines with Honeywell part numbers (P/Ns) for Woodward fuel control unit (FCU) assemblies listed in Table 1 to paragraph (c) of this AD, installed.

**Table 1 to Paragraph (c)—Affected FCU Assembly P/Ns**

Group No.	Engine	FCU assembly P/Ns
1	TPE331-1, -2, and -2UA	P/N 869199-13, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -31, -32, -33, -34, and -35.
2 *	TPE331-1, -2, and -2UA	P/N 869199-9, -10, -11, -12, -14, -16, -17, and -18.
3	TPE331-3U, -3UW, -5, -5A, -5AB, -5B, -6, -6A, -10AV, -10GP, -10GT, -10P, and -10T	P/N 893561-7, -8, -9, -10, -11, -14, -15, -16, -20, -26, -27, and -29; or P/N 897770-1, -3, -7, -9, -10, -11, -12, -14, -15, -16, -25, -26, and -28.
4 *	TPE331-3U, -3UW, -5, -5B, -6, -6A, and -10T	P/N 893561-4, -5, -12, and -13 or P/N 897770-5, -8, and -13.

5	TPE331-10, -10R, -10U, -10UA, -10UF, -10UG, -10UGR, -10UR, -11U, -12JR, -12UA, -12UAR, and -12UHR	P/N 897375-2, -3, -4, -5, -8, -9, -10, -11, -12, -13, -14, -15, -16, -17, -19, -21, -24, -25, -26, and -27; or P/N 897780-1, -2, -3, -4, -5, -6, -7, -8, -9, -10, -11, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24, -25, -26, -27, -30, -32, -34, -36, -37, and -38; or P/N 893561-17, -18, and -19.
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\* New/added FCU assembly P/Ns

#### **(d) Unsafe Condition**

We are issuing this AD to prevent failure of the fuel control drive that could result in damage to the engine and airplane.

#### **(e) Compliance**

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

#### **(1) Inspection of Engines With FCU Assembly P/Ns in Groups 2 and 4**

For FCU assembly P/Ns in Groups 2 and 4 listed in Table 1 to paragraph (c) of this AD:

(i) At the next scheduled inspection of the fuel control drive, or within 500 hours-in-service (HIS) after the effective date of this AD, whichever occurs first, inspect the fuel control drive for wear.

(ii) Thereafter, re-inspect the fuel control drive within every 1,000 HIS since-last-inspection (SLI).

#### **(2) Inspection of Engines With FCU Assembly P/Ns in Groups 1, 3, and 5**

For FCU assembly P/Ns in Groups 1, 3, or 5 listed in Table 1 to paragraph (c) of this AD:

(i) If on the effective date of this AD the FCU assembly has 950 or more HIS SLI, inspect the fuel control drive for wear within 50 HIS from the effective date of this AD.

(ii) If on the effective date of this AD the FCU assembly has fewer than 950 HIS SLI, inspect the fuel control drive for wear before reaching 1,000 HIS.

(iii) Thereafter, re-inspect the fuel control drive for wear within every 1,000 HIS SLI.

#### **(3) Airplane Operating Procedures**

Within 60 days after the effective date of this AD, insert the information in Figure 1 to paragraph (e) of this AD, into the Emergency Procedures Section of the Airplane Flight Manual (AFM), Pilot Operating Handbook (POH), and the Manufacturer's Operating Manual (MOM).

### Figure 1 to Paragraph (e) – Airplane Operating Procedures

NOTE

Procedures in dotted line boxes are immediate action items to be performed by the pilot / flight crew.

RAPID, UNCOMMANDED ACCELERATION DURING  
ENGINE START (Propeller ON Start Locks)

- Engine Start – Abort Immediately – Move condition lever to EMERGENCY STOP.

WARNING

Do not attempt to re-start engine. Report to maintenance.

ON GROUND or IN FLIGHT:

RAPID, UNCOMMANDED INCREASE IN RPM, TORQUE,  
FUEL FLOW AND/OR TURBINE TEMPERATURE  
(Propeller OFF Start Locks)

- Identify Malfunctioning Engine (multi-engine airplane) – Cross check for high torque, RPM, fuel flow, and turbine temperatures.
- Engine shut down - Move condition lever to EMERGENCY STOP.

WARNING

Never retard the power levers aft of flight idle in flight or on the ground.

WARNING

Do not attempt an engine re-start. Report to maintenance.

#### (f) Optional Terminating Action

Replacing the affected FCU assembly with an FAA-approved FCU assembly P/N not listed in this AD is terminating action for the initial and repetitive inspections required by this AD, and for inserting the information in Figure 1 to paragraph (e) of this AD into the AFM, POH, and MOM.

#### (g) Definitions

For the purposes of this AD:

(1) The "fuel control drive" is a series of mating splines located between the fuel pump and fuel control governor.

(2) The fuel control drive consists of four drive splines: The fuel pump internal spline, the fuel control external "quill shaft" spline, and the stub shaft internal and external splines.

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

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

**(i) Related Information**

(1) For more information about this AD, contact Joseph Costa, Aerospace Engineer, Los Angeles Aircraft Certification Office, FAA, Transport Airplane Directorate, 3960 Paramount Blvd., Lakewood, CA 90712-4137; phone: 562-627-5246; fax: 562-627-5210; email: joseph.costa@faa.gov.

(2) Information pertaining to operating recommendations for affected engines after a fuel control drive failure is contained in Honeywell International Inc., Operating Information Letter (OIL) OI331-12R6, dated May 26, 2009, for multi-engine airplanes; and in OIL OI331-18R4, dated May 26, 2009, for single-engine airplanes. Information on fuel control drive inspection can be found in Section 72-00-00 of the applicable TPE331 maintenance manuals. These Honeywell International Inc., OILs and the TPE331 maintenance manuals, which are not incorporated by reference in this AD, can be obtained from Honeywell International Inc., using the contact information in paragraph (i)(3) of this AD.

(3) For service information identified in this AD, contact Honeywell International Inc., 111 S. 34th Street, Phoenix, AZ 85034-2802; Internet: <https://myaerospace.honeywell.com/wps/portal/!ut>; phone: 800-601-3099.

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

**(j) Material Incorporated by Reference**

None.

Issued in Burlington, Massachusetts, on June 5, 2015.

Ann C. Mollica,  
Acting Directorate Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.



**2015-13-04 Turbomeca S.A.:** Amendment 39-18191; Docket No. FAA-2014-0164; Directorate Identifier 2014-NE-02-AD.

**(a) Effective Date**

This AD is effective September 1, 2015

**(b) Affected ADs**

This AD supersedes AD 2014-19-05, Amendment 39-17973 (79 FR 59091, October 1, 2014).

**(c) Applicability**

This AD applies to all Turbomeca S.A. Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, 1S1, 2B, 2B1, 2C, 2C1, 2C2, 2S1, and 2S2 turboshaft engines.

**(d) Unsafe Condition**

This AD was prompted by reports of uncommanded in-flight shutdowns on Turbomeca S.A. Arriel 1 and Arriel 2 engines following rupture of the 41-tooth gear forming part of the 41/23-tooth bevel gear located in the engine accessory gearbox (AGB). We are issuing this AD to prevent failure of the engine AGB, which could lead to in-flight shutdown and damage to the engine, which may result in damage to the aircraft.

**(e) Compliance**

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

(1) For all Turbomeca S.A. Arriel 1B, 1D, 1D1, 2B, and 2B1 turboshaft engines, perform a one-time vibration check of the AGB 41/23-tooth bevel gear meshing within 32 months of the effective date of this AD, as follows:

(i) For all Turbomeca S.A. Arriel 1B, 1D, and 1D1 engines, except those engines with an AGB installed with a serial number (S/N) listed in the figure under paragraph 2.2. of Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 292 72 0839, Version C, dated June 18, 2014, use paragraph 2.3.1. through 2.3.3. of Turbomeca S.A. MSB No. 292 72 0839, Version C, dated June 18, 2014, to perform the vibration check.

(ii) You must also use Turbomeca S.A. Arriel 1 Technical Instruction (TI) No. 292 72 0839 and Turbomeca S.A. Arriel 1 TI No. 292 72 0840 to do the vibration check.

(iii) For all Turbomeca S.A. Arriel 2B and 2B1 engines, except those engines with an AGB installed with an S/N listed in the figure under paragraph 2.2. of Turbomeca S.A. MSB No. 292 72 2849, Version C, dated June 18, 2014, use paragraphs 2.3.1. through 2.3.3. of Turbomeca S.A. MSB No. 292 72 2849, Version C, dated June 18, 2014, to perform the vibration check. Turbomeca S.A. MSB No. 292 72 2849 refers to Turbomeca S.A. Arriel 2 TI No. 292 72 2849 and to Turbomeca S.A. Arriel 2 TI No. 292 72 2850, which you must also use to do the vibration check.

(iv) The reporting requirements in paragraphs 2.3.1.1.3., 2.3.2.1.3., and the requirement to return module M01 (AGB) to a Repair Center in paragraph 2.3.2.2.2. in Turbomeca S.A. MSB No. 292 72

0839, Version C, dated June 18, 2014, and in Turbomeca S.A. MSB No. 292 72 2849, Version C, dated June 18, 2014, are not required by this AD.

(2) For all affected Turbomeca S.A. engines, during each engine shop visit after the effective date of this AD, perform a vibration check of the AGB 41/23-tooth bevel gear meshing.

(3) If the AGB does not pass the vibration check required by paragraphs (e)(1) or (e)(2) of this AD, replace the AGB with a part eligible for installation.

#### **(f) Credit for Previous Action**

If you performed a vibration check of the AGB before the effective date of this AD using Turbomeca S.A. MSB No. 292 72 0839, Version A, dated September 9, 2013, or Version B, dated November 25, 2013, or MSB No. 292 72 2849, Version A, dated September 9, 2013, or Version B, dated November 25, 2013; or during an engine shop visit per paragraph (e)(2) of this AD, you met the initial inspection requirement of paragraph (e)(1) of this AD.

#### **(g) Definition**

For the purpose of this AD, an "engine shop visit" is the induction of an engine into the shop for maintenance involving the separation of pairs of major mating engine flanges. The separation of engine flanges solely for the purpose of transportation without subsequent engine maintenance does not constitute an engine shop visit.

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

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

#### **(i) Related Information**

(1) For more information about this AD, contact Mark Riley, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7758; fax: 781-238-7199; email: mark.riley@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2014-0036, dated February 11, 2014, for related information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov/#!documentDetail;D=FAA-2014-0164-0003>.

(3) Turbomeca S.A. Engine Test Bed Acceptance Test Specifications CCT No. 0292009400, Version T; CCT No. 0292019400, Version R; CCT No. 0292019690, Version I; CCT No. 0292019530, Version K; CCT No. 0292019610, Version K; CCT No. 0292029450, Version J; CCT No. 0292029490, Version I; CCT No. 0292029440, Version I; CCT No. 0292029480, Version K; CCT No. 0292029520, Version H; CCT No. 0292029410, Version L; CCT No. 0292029530, Version H; or Turbomeca ID No. 383952; or Turbomeca RTD No. X 292 65 327 2, provide information on performing a vibration check during an engine shop visit. These service documents can be obtained from Turbomeca S.A. using the contact information in paragraph (j)(5) of this AD.

#### **(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 September 1, 2015.

(i) Turbomeca S.A. Mandatory Service Bulletin (MSB) No. 292 72 0839, Version C, dated June 18, 2014.

(ii) Turbomeca S.A. MSB No. 292 72 2849, Version C, dated June 18, 2014.

(4) The following service information was approved for IBR on November 5, 2014 (79 FR 59091, October 1, 2014).

(i) Turbomeca S.A. MSB No. 292 72 0839, Version B, dated November 25, 2013.

(ii) Turbomeca S.A. MSB No. 292 72 2849, Version B, dated November 25, 2013.

(iii) Turbomeca S.A. Arriel 1 Technical Instruction (TI) No. 292 72 0839, Version E, dated February 20, 2014.

(iv) Turbomeca S.A. Arriel 1 TI No. 292 72 0840, Version A, dated November 29, 2013.

(v) Turbomeca S.A. Arriel 2 TI No. 292 72 2849, Version E, dated February 20, 2014.

(vi) Turbomeca S.A. Arriel 2 TI No. 292 72 2850, Version A, dated November 29, 2013.

(5) For Turbomeca S.A. service information identified in this AD, contact Turbomeca S.A., 40220 Tarnos, France; phone: 33 0 5 59 74 40 00; telex: 570 042; fax: 33 0 5 59 74 45 15.

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

(7) 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>.

Issued in Burlington, Massachusetts, on July 16, 2015.

Robert J. Ganley,  
Acting Manager, Engine & Propeller Directorate,  
Aircraft Certification Service.



**DATE: August 6, 2015**  
**AD #: 2015-16-51**

This emergency airworthiness directive (EAD) 2015-16-51 is being sent to owners and operators of Bell Helicopter Textron Canada Limited (Bell) Model 429 helicopters.

### **Background**

This EAD was prompted by several reports of worn tail rotor pitch link spherical bearings. This condition, if not corrected, could result in pitch link failure and subsequent loss of control of the helicopter.

Transport Canada, which is the aviation authority for Canada, has issued EAD No. CF-2015-16, dated July 2, 2015, to correct an unsafe condition for the Bell Model 429 helicopters. Transport Canada advises that in-service reports showed that the tail rotor pitch link spherical bearings have experienced early and accelerated wear. On three occasions, bearings were found worn beyond limits during pre-flight inspections, showing a radial and axial play that was easily detectable. In one case, the spherical bearing separated from the tail rotor pitch link, resulting in damage to the tail rotor blade pitch horn assembly. In another case, the spherical bearing had been inspected and found acceptable during a maintenance inspection; about "1 hour air time" later, it was found worn beyond limits during a pre-flight inspection.

### **FAA's Determination**

This helicopter has been approved by the aviation authority of Canada and is approved for operation in the United States. Pursuant to our bilateral agreement with Canada, Transport Canada, its technical representative, has notified us of the unsafe condition described in its EAD. We are issuing this EAD because we evaluated all information provided by Transport Canada and determined the unsafe condition exists and is likely to exist or develop on other helicopters of the same type design.

### **Related Service Information**

Bell has issued Alert Service Bulletin 429-15-16, dated February 18, 2015 (ASB). The ASB applies to Bell Model 429 helicopters, S/N 57001 and subsequent, which have accumulated more than 50 hours. The ASB specifies the following actions:

- Inspecting both inboard and outboard tail rotor pitch link assemblies for axial and radial play;
- If abnormal wear or bearing play is detected, removing the affected tail rotor pitch link and performing a dimensional check of both axial and radial play; and
- Replacing any tail rotor pitch link assembly 429-012-112-101 or -103 or pitch link bearing 429-312-107-103 that exceeds the allowable limits.

### **EAD Requirements**

This EAD requires, before further flight, and thereafter at intervals not to exceed 50 hours time-in-service (TIS), inspecting each inboard and outboard tail rotor pitch link assembly for axial or radial bearing play. If there is axial or radial bearing play, removing the tail rotor pitch link and performing a dimensional inspection for wear are required. If there is wear that exceeds the allowable limits, replacing the tail rotor pitch link assembly is required.

### **Differences between this EAD and the Transport Canada EAD**

The Transport Canada EAD requires the inspection of the inboard and outboard tail rotor pitch link assembly for wear or axial or radial bearing play to be done within 10 hours TIS, and this EAD requires the inspection before further flight.

### **Interim Action**

We consider this EAD to be an interim action. If final action is later identified, we might consider further rulemaking then.

### **Authority for this Rulemaking**

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

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

### **Adoption of the Emergency Airworthiness Directive (EAD)**

We are issuing this EAD under 49 U.S.C. Sections 106(g), 40113, and 44701 according to the authority delegated to me by the Administrator.

2015-16-51 **Bell Helicopter Textron Canada Limited**: Directorate Identifier 2015-SW-23-AD.

**(a) Applicability**

This EAD applies to Model 429 helicopters that have 50 or more hours time-in-service (TIS), with a pitch link assembly part number 429-012-112-101 or -103 installed, certificated in any category.

**(b) Unsafe Condition**

This EAD defines the unsafe condition as a worn pitch link. This condition, if not detected and corrected, could result in pitch link failure and subsequent loss of control of the helicopter.

**(c) Effective Date**

This EAD is effective upon receipt.

**(d) Compliance**

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

**(e) Required Actions**

Before further flight and thereafter at intervals not to exceed 50 hours TIS, inspect each inboard and outboard tail rotor pitch link assembly for axial or radial bearing play. If there is axial or radial bearing play, remove the tail rotor pitch link and perform a dimensional inspection for wear. If there is wear that exceeds the allowable limits, replace the tail rotor pitch link assembly.

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

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this EAD. Send your proposal to: David Hatfield, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email [9-ASW-FTW-AMOC-Requests@faa.gov](mailto:9-ASW-FTW-AMOC-Requests@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 EAD through an AMOC.

**(g) Additional Information**

(1) For further information contact: David Hatfield, Aviation Safety Engineer, Safety Management Group, Rotorcraft Directorate, FAA, 10101 Hillwood Pkwy, Fort Worth, TX 76177; telephone (817) 222-5110; email [david.hatfield@faa.gov](mailto:david.hatfield@faa.gov).

(2) Bell Helicopter Alert Service Bulletin 429-15-16, dated February 18, 2015, which is not incorporated by reference, contains additional information about the subject of this EAD. For a copy of the ASB, 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/>.

(3) The subject of this EAD is addressed in Transport Canada AD No. CF-2015-16, dated July 2, 2015.

**(h) Subject**

Air Transport Association of America (ATA) Tracking Code: 6720 Tail Rotor Control System.

Issued in Fort Worth, Texas, on August 6, 2015.

Larry M. Kelly,  
Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.