

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

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

BIWEEKLY 2013-11

5/20/2013 - 6/2/2013



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

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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



2013-10-05 Eurocopter Deutschland GmbH Helicopters: Amendment 39-17458; Docket No. FAA-2013-0445; Directorate Identifier 2012-SW-098-AD.

(a) Applicability

This AD applies to Eurocopter Deutschland GmbH (ECD) Model MBB-BK 117 C-2 helicopters, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a failure of the autotrim system in pitch or roll, or a combined inoperative autotrim in the cyclic and yaw axis. This condition could significantly increase the pilot's workload to stabilize the helicopter, especially in low visibility conditions, resulting in loss of helicopter control.

(c) Effective Date

This AD becomes effective June 10, 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 Action

Within 25 hours time-in-service or 30 days, whichever comes first, revise the Operating Limitations section of the MBB-BK 117C-2 Rotorcraft Flight Manual (RFM), under paragraph 2.2, Kinds of Operations, by inserting a copy of this AD into the RFM or by making pen and ink changes to add the following statement:

Dispatch under Instrument Flight Rules (IFR) or night Visual Flight Rules (VFR) with the Autotrim inoperative in Pitch or Roll or a combined inoperative Autotrim in Cyclic and Yaw axis is PROHIBITED.

(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, Safety Management Group, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; 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 Alert Service Bulletin MBB-BK117 C-2-22A-013, dated October 12, 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, 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.

(2) The subject of this AD is addressed in the European Aviation Safety Agency AD No. 2012-0216, dated October 18, 2012.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 22, Autopilot Dispatch Restriction.

Issued in Fort Worth, Texas, on May 14, 2013.

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



2013-11-02 Aircraft Industries a.s.: Amendment 39-17462; Docket No. FAA-2013-0456; Directorate Identifier 2013-CE-011-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective June 18, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Aircraft Industries a.s. Model L-420 airplanes, all serial numbers, certificated in any category.

(d) Subject

Air Transport Association of America (ATA) Code 82: Water Injection.

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as in-flight engine flame out occurred at take-off with water injection after reduction of engine power. We are issuing this AD to correct this condition, which, if not corrected, could lead to further events of uncommanded in-flight engine shut-down or power loss, possibly resulting in forced landing, with consequent damage to the airplane and injury to occupants.

(f) Actions and Compliance

Unless already done, within 30 days after June 18, 2013 (the effective date of this AD), amend the applicable airplane flight manual (AFM) by inserting a copy of Appendix 1 of this AD, opposite the appropriate AFM page on which the water injection procedure is described.

(g) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, Standards Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. Send information to ATTN: Doug Rudolph, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4059; fax: (816) 329-4090; email: doug.rudolph@faa.gov. Before using any approved AMOC on any airplane to

which the AMOC applies, notify your appropriate principal inspector (PI) in the FAA Flight Standards District Office (FSDO), or lacking a PI, your local FSDO.

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

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2013-0097, dated April 24, 2013, for related information.

Appendix 1 to AD 2013-11-02

AIRPLANE FLIGHT MANUAL (AFM)

PROCEDURE TO CONTROL WATER INJECTION SYSTEM for Aircraft Industries a.s. Model L-420 Airplanes

Appendix 1–AFM procedure

Procedure to Control Water Injection System

- WATER INJECTION circuit breaker ON
 - TCL..... TQ=min. 60%
 - WATER INJECTION/ON push-button Push and hold till amber WATER INJECTION signal comes on (on the front control panel)
- Before throttling back power:
- WATER INJECTION/OFF push-button Push and check amber WATER INJECTION signal extinguishes

WARNING

IF IT IS NECESSARY TO CHANGE TAKE-OFF RATING WITH WATER INJECTION TO LOWER RATING, WATER INJECTION MUST BE STOPPED PRIOR ENGINE POWER DECREASE OTHERWISE ENGINE FLAME OUT CAN OCCUR.

CAUTION

ITT RISES WHEN WATER INJECTION IS TERMINATED. THEREFORE MONITOR ITT AFTER WATER INJECTION TERMINATION AND THROTTLE BACK THE ENGINES AS REQUIRED TO AVOID EXCEEDING THE MAXIMUM PERMISSIBLE LIMIT OF ITT.

NOTE

If water injection pump was set to appropriate degree according to graph in AFM and corresponding amount of water was filled in into water injection tank, the water injection will not last longer than the permissible time for take-off rating using. After exhaustion of the water supply the injection system pressure drops, the injection pump is shut down automatically, and the WATER INJECTION signal on the CWD goes out.

Issued in Kansas City, Missouri, on May 20, 2013.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.



2013-11-09 Turbomeca S.A.: Amendment 39 17469; Docket No. FAA-2013-0024; Directorate Identifier 2000-NE-12-AD.

(a) Effective Date

This AD is effective July 5, 2013.

(b) Affected ADs

This AD supersedes AD 2001-08-14R1, Amendment 39 14423 (71 FR 2993, January 19, 2006).

(c) Applicability

This AD applies to all Turbomeca S.A. Arrius 2B1 and 2F turboshaft engines.

(d) Unsafe Condition

This AD was prompted by a report that the corrective actions of AD 2001-08-14R1, Amendment 39 14423 (71 FR 2993, January 19, 2006) were insufficient to eliminate the unsafe condition. We are issuing this AD to prevent an uncommanded in-flight shutdown of Arrius 2B1 and 2F turboshaft engines and damage to the helicopter.

(e) Compliance

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

(f) Arrius 2B1 Turboshaft Engines

(1) Replace the fuel injector manifolds and privilege injector with parts eligible for installation before exceeding 200 operating hours, time-since-new (TSN).

(2) Borescope-inspect the flame tube and the high-pressure turbine area for turbine distress, when replacing the fuel injection manifolds and privilege injector for the first time.

(3) Thereafter, within every 200 operating hours, time-in-service (TIS) since last fuel injector manifolds and privilege injector replacement, or sooner if a power check performed per flight manual EC T135-T1 indicates a negative T45 margin, replace the fuel injector manifolds and the privilege injector with parts eligible for installation.

(g) Arrius 2F Turboshaft Engines

(1) Replace the privilege injector with a privilege injector eligible for installation before exceeding 400 operating hours TSN.

(2) Borescope-inspect the flame tube and the high-pressure turbine area for turbine distress, when replacing the privilege injector for the first time.

(3) Thereafter, within every 400 operating hours TIS since last privilege injector replacement, replace the privilege injector with parts eligible for installation.

(h) Definition

For the purposes of this AD, TIS is defined as:

- (1) The number of engine operating hours on the manifolds since the manifolds were new or since the manifolds were last cleaned, whichever is more.
- (2) The number of engine operating hours on the privilege injector since the privilege injector was new or since the privilege injector was last cleaned, whichever is more.

(i) Installation Prohibitions

(1) For Arrius 2B1 turboshaft engines, after the effective date of this AD, do not install fuel injector manifolds or a privilege injector on an engine, or an engine on a helicopter, unless the fuel injection manifold and privilege injector have accumulated fewer than 200 operating hours since new, or since last inspection.

(2) For Arrius 2F turboshaft engines, after the effective date of this AD, do not install a privilege injector on an engine, or an engine on a helicopter, unless the privilege injector has accumulated fewer than 400 operating hours since new, or since last inspection.

(j) Alternative Methods of Compliance (AMOCs)

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

(k) Related Information

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

(2) See European Aviation Safety Agency AD 2012-0150, dated August 8, 2012, and AD 2012-0249, dated November 21, 2012, Turbomeca S.A. Alert Mandatory Service Bulletin (MSB) No. A319 73 2012, Version I, dated November 12, 2012, and Turbomeca S.A. Alert MSB No. A319 73 4001, Version L, dated January 17, 2013, for related information.

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

(l) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on May 23, 2013.
Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.