

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

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

BIWEEKLY 2017-06

3/6/2017 - 3/19/2017



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
Information Key: E - Emergency; COR - Correction; S – Supersedes; R - Replaces			
Biweekly 2017-01			
2016-24-51		Sikorsky Aircraft Corporation	S-92A
2016-25-13	S 2016-04-12	Safran Helicopter Engines, S.A.	Arriel 2B, 2B1, 2C, 2C1, 2C2, 2D, 2E, 2S1, and 2S2
2016-25-14		Airbus Helicopters Deutschland GmbH	BO-105LS A-3
2016-25-19	S 2010-21-07	Airbus Helicopters	AS350B3 and EC130B4
2016-25-20		Airbus Helicopters	EC130B4, EC130T2, AS350B, AS350B1, AS350B2, AS350B3, AS350BA, AS350C, AS350D, AS350D1, AS355E, AS355F, AS355F1, AS355F2, AS355N, and AS355NP
2016-25-28		Airbus Helicopters	AS355NP
2016-26-01		AGUSTAWESTLAND S.P.A.	AB139 and AW139
2016-26-04		Robinson Helicopter Company	R44 and R44 II; R66
2016-26-08	R 2014-22-01	PILATUS AIRCRAFT LTD.	PC-12, PC-12/45, PC-12/47, and PC-12/47E
2016-26-09	S 2016-06-01	B-N Group Ltd.	BN-2, BN-2A, BN-2A-2, BN-2A-3, BN-2A-6, BN-2A-8, BN-2A-9, BN-2A-20, BN-2A-21, BN-2A-26, BN-2A-27, BN-2B-20, BN-2B-21, BN-2B-26, BN-2B-27, BN-2T-4R, BN-2T, BN2A MK. III, BN2A MK. III-2, and BN2A MK. III-3
Biweekly 2017-02			
2017-01-12		Diamond Aircraft Industries GmbH	DA 42 airplanes
2017-02-51		Sikorsky Aircraft Corporation	S-92A helicopters
Biweekly 2017-03			
No ADs			
Biweekly 2017-04			
2016-26-08	COR	PILATUS AIRCRAFT LTD.	PC-12, PC-12/45, PC-12/47, and PC-12/47E airplanes
2017-02-06		Piper Aircraft, Inc.	PA-31T, PA-31T1, PA-31T2, PA-31T3, and PA-31P-350 airplanes
2017-02-07		Airbus Helicopters Deutschland GmbH	MBB-BK 117 C-2, and Model MBB-BK 117 D-2 helicopters
2017-02-11		Alexander Schleicher GmbH & Co.	ASK 21 gliders
2017-04-51		Safran Helicopter Engines, S.A.	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S and 1S1 turboshaft engines
Biweekly 2017-05			
2017-02-51		Sikorsky Aircraft Corporation	S-92A helicopters
2017-03-01	S 2014-05-06	Airbus Helicopters Deutschland GmbH	EC135 P1, P2, P2+, T1, T2, and T2+ helicopters
2017-04-03		Pilatus Aircraft Limited	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 airplanes
2017-04-06		United Instruments, Inc.	5934 series altimeters
2017-04-14		Textron Aviation Inc.	560XL airplanes
2017-04-15		Learjet Inc.	36A airplanes
2017-05-03		Airbus Helicopters Deutschland GmbH	BO-105C, BO-105LS A-3, and BO-105S helicopters
2017-05-04		Bell Helicopter Textron Canada Limited	206A, 206B, 206L, 206L1, 206L3, and 206L4 helicopters
2017-05-51		Bell Helicopter Textron Canada	429 helicopters
Biweekly 2017-06			
2017-05-08		Safran Helicopter Engines, S.A.	Arriel 2B turboshaft engines
2017-04-51		Safran Helicopter Engines, S.A.	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines



2017-05-08 Safran Helicopter Engines, S.A. (Type Certificate previously held by Turbomeca, S.A.): Amendment 39-18819; Docket No. FAA-2016-7850; Directorate Identifier 2016-NE-16-AD.

(a) Effective Date

This AD becomes effective April 13, 2017.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Safran Helicopter Engines S.A. Arriel 2B turboshaft engines with a pre-modification (mod) TU 158 hydro-mechanical metering unit (HMU), installed.

(d) Reason

This AD was prompted by a report of an uncommanded in-flight shutdown (IFSD) on a single engine helicopter caused by a low returning spring rate of the needle of the HMU. We are issuing this AD to prevent failure of the HMU, failure of the engine, IFSD, and loss of the helicopter.

(e) Actions and Compliance

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

(1) For an engine in pre-mod TU 158 configuration, within 200 engine hours, or within 5 months, whichever occurs first after the effective date of this AD, remove the pre-mod TU 158 HMU from service and replace it with a part eligible for installation.

(2) Reserved.

(f) Installation Prohibition

After the effective date of the AD, do not install any pre-mod TU 158 HMU into any engine.

(g) Definition

For the purpose of this AD, an HMU eligible for installation is one that incorporates mod TU 158 in accordance with Safran Helicopter Engines, S.A. Mandatory Service Bulletin No. 292 73 3158, Version A, dated April 7, 2016, or other FAA-approved parts.

(h) 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. You may email your request to: ANE-AD-AMOC@faa.gov.

(i) Related Information

(1) For more information about this AD, contact Kenneth Steeves, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7765; fax: 781-238-7199; email: kenneth.steeves@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency (EASA), AD 2016-0098, dated May 23, 2016, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2016-7850.

(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) Safran Helicopter Engines Mandatory Service Bulletin No. 292 73 3158, Version A, dated April 7, 2016.

(ii) Reserved.

(3) For Safran Helicopter Engines service information identified in this AD, contact Safran Helicopter Engines, S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) 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 February 27, 2017.

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



2017-04-51 Safran Helicopter Engines, S.A.: Amendment 39-18824; Docket No. FAA-2017-0115; Directorate Identifier 2017-NE-04-AD.

(a) Effective Date

This AD is effective March 30, 2017 to all persons except those persons to whom it was made immediately effective by Emergency AD 2017-04-51, issued on February 8, 2017, which contained the requirements of this amendment.

(b) Affected ADs

None.

(c) Applicability

This AD applies to all Safran Helicopter Engines, S.A., Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines equipped with a drain valve assembly (DV) with a part number and a serial number listed in Appendix 5.1 in Safran Helicopter Engines Alert Mandatory Service Bulletin (MSB) A292 73 0851, Version A, dated January 31, 2017.

(d) Subject

Joint Aircraft System Component (JASC) Code 7321, Fuel Control/Turbine Engines.

(e) Unsafe Condition

This AD was prompted by reports of fuel leaks originating from the DV on certain Arriel engines. We are issuing this AD to prevent an engine compartment fire, in-flight shutdown, and damage to the helicopter.

(f) Compliance

- (1) Comply with this AD within the compliance times specified, unless already done.
- (2) Within 10 flight hours or 7 days, whichever occurs first, after the effective date of this AD:
 - (i) Replace the affected DV with a DV eligible for installation. Use the Accomplishment Instructions, Paragraph 2, of Safran Helicopter Engines Alert MSB A292 73 0851, Version A, dated January 31, 2017, to do the replacement; or
 - (ii) Visually inspect the affected DV for fuel leakage.
 - (A) If a fuel leak is detected, replace the affected DV with a DV eligible for installation, before the next flight.
 - (B) If no fuel leak is detected, before next flight, wrap the affected DV with a self-amalgamate tape using the Accomplishment Instructions, paragraph 2, of Safran Helicopter Engines Alert MSB A292 73 0851, Version A, dated January 31, 2017.

(C) After wrapping an affected DV, as specified in paragraph (f)(2)(ii)(B) of this AD, inspect the DV for fuel leakage before each first flight of the day. If a fuel leak is detected, replace the affected DV with a DV eligible for installation, before the next flight.

(D) After wrapping an affected DV, as specified in paragraph (f)(2)(ii)(B) of this AD, inspect the DV wrapping before each first flight of the day. If the wrapping is found defective (loose, missing, or damaged), before the next flight, remove the wrap and re-wrap the affected DV using the Accomplishment Instructions, paragraph 2, of Safran Helicopter Engines Alert MSB A292 73 0851, Version A, dated January 31, 2017.

(E) For an engine on which the affected DV was wrapped, within 180 days after the first wrapping of the affected DV as specified in paragraph (f)(2)(ii)(B) of this AD, replace the affected DV with a DV eligible for installation.

(g) Definitions

For the purpose of this AD, a DV eligible for installation is:

- (1) a DV that is not affected by this AD; or
- (2) a DV in which the diaphragm has been replaced in accordance with the instructions in paragraph 4 of Safran Helicopter Engines Alert MSB A292 73 0851, Version A, dated January 31, 2017.

(h) Terminating Action

Replacement of an affected DV installed on an engine, with a DV eligible for installation constitutes terminating action for the repetitive inspections required by paragraph (f)(2)(ii) of this AD.

(i) 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. You may email your request to: ANE-AD-AMOC@faa.gov.

(j) Related Information

(1) For further information about this AD, contact: Robert Green, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA 01803; phone: 781-238-7754; fax: 781-238-7199; email: robert.green@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency Emergency AD No. 2017-0019-E, dated February 3, 2017, for more information.

(k) 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) Safran Helicopter Engines Alert Mandatory Service Bulletin A292 73 0851, Version A, dated January 31, 2017.

(ii) Reserved.

(3) For Safran Helicopter Engines service information identified in this AD, contact Safran Helicopter Engines, S.A., 40220 Tarnos, France; phone: (33) 05 59 74 40 00; fax: (33) 05 59 74 45 15.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 1200 District Avenue, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) 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 March 8, 2017.

Carlos A. Pestana,
Acting Assistant Manager, Engine & Propeller Directorate,
Aircraft Certification Service.