

**FEDERAL AVIATION ADMINISTRATION  
AIRWORTHINESS DIRECTIVES**

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

**BIWEEKLY 2017-04**

*2/6/2017 - 2/19/2017*



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
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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			



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**2016-26-08 PILATUS AIRCRAFT LTD.:** Amendment 39-18766; Docket No. FAA-2016-7003; Directorate Identifier 2016-CE-015-AD.

**(a) Effective Date**

This airworthiness directive (AD) is effective February 9, 2017.

**(b) Affected ADs**

This AD replaces AD 2014-22-01, 39-18005 (79 FR 67343, November 13, 2014).

**(c) Applicability**

This AD applies to PILATUS AIRCRAFT LTD. Models PC-12, PC-12/45, PC-12/47, and PC-12/47E airplanes, all manufacturer serial numbers (MSNs), certificated in any category.

**(d) Subject**

Air Transport Association of America (ATA) Code 5: Time Limits.

**(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 a need to incorporate new revisions into the Limitations section, Chapter 4, of the FAA-approved maintenance program (e.g., maintenance manual). The limitations were revised to include repetitive inspections of the main landing gear (MLG) attachment bolts. These actions are required to ensure the continued operational safety of the affected airplanes.

**(f) Actions and Compliance**

Unless already done, do the actions in paragraphs (f)(1) through (6) of this AD:

(1) Before further flight after February 9, 2017 (the effective date of this AD), insert the following revisions into the Limitations section of the FAA-approved maintenance program (e.g., maintenance manual). Compliance with an electronic version of the Limitations section is acceptable provided the specifically referenced sections are followed even though there may be differences with the pagination:

(i) STRUCTURAL, COMPONENT AND MISCELLANEOUS–AIRWORTHINESS LIMITATIONS, Data module code 12-A-04-00-00-00A-000A-A, dated July 12, 2016, of the Pilatus Model type–PC-12, PC-12/45, PC-12/47 MSN-101-888, Aircraft Maintenance Manual (AMM), Document No. 02049, 12-A-AM-00-00-00-I, revision 32, dated July 18, 2016; and

(ii) STRUCTURAL AND COMPONENT LIMITATIONS–AIRWORTHINESS LIMITATIONS, Data module code 12-B-04-00-00-00A-000A-A, dated July 19, 2016, of the Pilatus

Model type–PC-12/47E MSN-1001-UP, Aircraft Maintenance Manual (AMM), Document No. 02300, 12-B-AM-00-00-00-I, revision 15, dated July 30, 2016.

(2) The new limitations section revisions listed in paragraphs (f)(1)(i) and (ii) of this AD specify the following:

- (i) Establish inspections of the MLG attachment bolts,
- (ii) Specify replacement of components before or upon reaching the applicable life limit, and
- (iii) Specify accomplishment of all applicable maintenance tasks within certain thresholds and intervals.

(3) Only authorized Pilatus Service Centers can do the Supplemental Structural Inspection Document (SSID) as required by the documents in paragraphs (f)(1)(i) and (ii) of this AD because deviations from the type design in critical locations could make the airplane ineligible for this life extension.

(4) If no compliance time is specified in the documents listed in paragraphs (f)(1)(i) and (ii) of this AD when doing any corrective actions where discrepancies are found as required in paragraph (f)(2)(iii) of this AD, do these corrective actions before further flight after doing the applicable maintenance task.

(5) During the accomplishment of the actions required in paragraph (f)(2) of this AD, including all subparagraphs, if a discrepancy is found that is not identified in the documents listed in paragraphs (f)(1)(i) and (ii) of this AD, before further flight after finding the discrepancy, contact PILATUS AIRCRAFT LTD. at the address specified in paragraph (h) of this AD for a repair scheme and incorporate that repair scheme.

(6) Before or upon accumulating 6 years time-in-service (TIS) on the MLG attachment bolts or within the next 3 months TIS after February 9, 2017 (the effective date of this AD), whichever occurs later, inspect the MLG attachment bolts for cracks and corrosion and before further flight take all necessary corrective actions.

#### **(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.

(i) 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.

(ii) AMOCs approved for AD 2014-22-01, 39-18005 (79 FR 67343, November 13, 2014) are not approved as AMOCs for this AD.

(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. 2016-0083, dated April 28, 2016, for related information. You may examine the MCAI on the Internet at <https://www.regulations.gov/document?D=FAA-2016-7003-0002>.

**(i) Material Incorporated by Reference**

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

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

(i) STRUCTURAL, COMPONENT AND MISCELLANEOUS–AIRWORTHINESS LIMITATIONS, Data module code 12-A-04-00-00-00A-000A-A, dated July 12, 2016, of the Pilatus Model type–PC-12, PC-12/45, PC-12/47 MSN-101-888, Aircraft Maintenance Manual (AMM), Document No. 02049, 12-A-AM-00-00-00-I, revision 32, dated July 18, 2016.

(ii) STRUCTURAL AND COMPONENT LIMITATIONS–AIRWORTHINESS LIMITATIONS, Data module code 12-B-04-00-00-00A-000A-A, dated July 19, 2016, of the Pilatus Model type–PC-12/47E MSN-1001-UP, Aircraft Maintenance Manual (AMM), Document No. 02300, 12-B-AM-00-00-00-I, revision 15, dated July 30, 2016.

(3) For PILATUS AIRCRAFT LTD. service information identified in this AD, contact PILATUS AIRCRAFT LTD., Customer Service Manager, CH-6371 STANS, Switzerland; telephone: +41 (0) 41 619 33 33; fax: +41 (0) 41 619 73 11; Internet: <http://www.pilatus-aircraft.com> or email: [SupportPC12@pilatus-aircraft.com](mailto:SupportPC12@pilatus-aircraft.com).

(4) You may view this service information at FAA, 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. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-7003.

(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 January 24, 2017.

Melvin Johnson,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.



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**2017-02-06 Piper Aircraft, Inc.:** Amendment 39-18785; Docket No. FAA-2017-0045; Directorate Identifier 2017-CE-002-AD.

**(a) Effective Date**

This AD is effective February 22, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Piper Aircraft, Inc. Models PA-31T, serial numbers (SN) 31T-7400002 through 31T-8120104; PA-31T1, SNs 31T-7804001 through 31T-8304003 and SNs 31T-1104004 through 31T-1104017; PA-31T2, SNs 31T-8166001 through 31T-8166076 and 31T-1166001 through 31T-1166008; PA-31T3, SNs 31T-8275001 through 31T-8475001 and 31T-5575001; and PA-31P-350, SNs 31P-8414001 through 31P-8414050; certificated in any category.

**(d) Subject**

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 2497, Electrical Power/Electrical Power System Wiring.

**(e) Unsafe Condition**

This AD was prompted by a fatal accident where evidence of thermal damage in the area below the main circuit breaker panel was found. We are issuing this AD to detect and correct rubbing/chafing of wiring with other wires, adjacent structure, and/or flammable fuel lines, which could lead to electrical arcing and possible inflight fire in an area that is not accessible by the crew.

**(f) Compliance**

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

**(g) Inspection**

(1) Within 30 days after February 22, 2017 (the effective date of this AD) and repetitively thereafter at intervals not to exceed 12 calendar months, do a detailed visual inspection of the wiring in the area below the main circuit breaker panel using mirrors, a suitable light source, and other equipment (small cameras, borescopes, and magnification, etc.) as needed to do the visual inspection of the area. Follow paragraphs 1, 2, and 3 of the Instructions section of Piper Aircraft, Inc. Service Bulletin No. 1301, dated January 6, 2017.

Note 1 to paragraph (g)(1) of this AD: You may begin the repetitive inspections before 12 calendar months after the initial inspection to coincide the repetitive inspection with the annual inspection.

(2) If any damage and/or rubbing or chafing is found during any of the inspections required in paragraph (g)(1) of this AD, before further flight, reroute, rework, or replace any wires as specified in paragraphs 2 and 3 of the Instructions section of Piper Aircraft, Inc. Service Bulletin No. 1301, dated January 6, 2017.

(3) Perform a functional test after any inspection required by this AD as specified in paragraph 4 of the Instructions section of Piper Aircraft, Inc. Service Bulletin No. 1301, dated January 6, 2017.

(4) The Summary section of Piper Aircraft, Inc. Service Bulletin No. 1301, dated January 6, 2017, states to contact the Factory Authorized Piper Service Facility to make arrangements for compliance with the service bulletin. Any appropriately licensed mechanic may do the work of this AD. Please note that to receive any warranty credit from Piper, the work may need to be done at the Factory Authorized Service Facility.

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

(1) The Manager, Atlanta 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 paragraph (i) 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.

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

For more information about this AD, contact Bryan Long, Aerospace Engineer, FAA, Atlanta Aircraft Certification Office, 1701 Columbia Avenue, College Park, Georgia 30337; phone: (404) 474-5578; fax: (404) 474-5606; email: bryan.long@faa.gov.

#### **(j) Material Incorporated by Reference**

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

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

(i) Piper Aircraft, Inc. Service Bulletin No. 1301, dated January 6, 2017.

(ii) Reserved.

(3) For service information identified in this AD, contact Piper Aircraft, Inc., Customer Service, 2926 Piper Drive, Vero Beach, Florida 32960; telephone: (877) 879-0275; fax: none; email: customer.service@piper.com; Internet: www.piper.com.

(4) You may view this referenced 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.

(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 January 18, 2017.  
Melvin Johnson,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.



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**2017-02-07 Airbus Helicopters Deutschland GmbH:** Amendment 39-18786; Docket No. FAA-2016-7415; Directorate Identifier 2015-SW-076-AD.

**(a) Applicability**

This AD applies to Model MBB-BK 117 C-2 helicopters, serial numbers up to and including 9750, and Model MBB-BK 117 D-2 helicopters, serial numbers up to and including 20110, with a hydraulic module plate assembly part number B291M0003103 with a single locking attachment point installed, certificated in any category.

**(b) Unsafe Condition**

This AD defines the unsafe condition as failure of a hydraulic module plate assembly attachment point (attachment point). This condition could result in loss of the hydraulic module plate and subsequent loss of control of the helicopter.

**(c) Effective Date**

This AD becomes effective March 17, 2017.

**(d) Compliance**

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

**(e) Required Actions**

(1) Within 100 hours time-in-service (TIS):

(i) Visually inspect the split pins, castellated nuts, plugs, nuts, and hexagon bolts of each attachment point for a crack and for proper installation by following the Accomplishment Instructions, paragraphs 3.B.1.2.a. through 3.B.1.2.e., of Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003, Revision 0, dated October 12, 2015 (ASB MBB-BK117 C-2-29A-003), or Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001, Revision 0, dated October 12, 2015 (ASB MBB-BK117 D-2-29A-001), as applicable to your model helicopter. Replace any part that has a crack before further flight. If the split pins, castellated nuts, or hexagon bolts are not as depicted in Figure 2 of ASB MBB-BK117 C-2-29A-003 or ASB MBB-BK117 D-2-29A-001, before further flight, properly install them.

(ii) Apply a torque of 9 to 10 Nm to the left-hand and right-hand nuts of each attachment point. If a torque of 9 to 10 Nm cannot be applied, replace the affected nut before further flight.

(2) Thereafter, at intervals not to exceed 400 hours TIS, perform the inspection in paragraph (e)(1)(i) 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: Matt Fuller, Senior 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.

(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) Airbus Helicopters Alert Service Bulletin (ASB) No. ASB MBB-BK117 C-2-29A-003 and Airbus Helicopters ASB No. ASB MBB-BK117 D-2-29A-001, both Revision 1, and both dated October 14, 2016, which are not incorporated by reference, contain additional information about the subject of this final rule. For service information identified in this final rule, contact Airbus Helicopters, 2701 N. Forum Drive, Grand Prairie, TX 75052; telephone (972) 641-0000 or (800) 232-0323; fax (972) 641-3775; or at <http://www.airbushelicopters.com/techpub>. You may review a copy of the service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

(2) The subject of this AD is addressed in European Aviation Safety Agency (EASA) AD No. 2015-0210R1, Revision 1, dated October 28, 2015, and EASA AD No. 2015-0210R2, Revision 2, dated December 2, 2016. You may view the EASA ADs on the Internet at <http://www.regulations.gov> in Docket No. FAA-2016-7415.

**(h) Subject**

Joint Aircraft Service Component (JASC) Code: 2900, Hydraulic Power System.

**(i) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference 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) Airbus Helicopters Alert Service Bulletin No. ASB MBB-BK117 C-2-29A-003, Revision 0, dated October 12, 2015.

(ii) Airbus Helicopters Alert Service Bulletin No. ASB MBB-BK117 D-2-29A-001, Revision 0, dated October 12, 2015.

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

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call (817) 222-5110.

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

Issued in Fort Worth, Texas, on January 18, 2017.  
Lance T. Gant,  
Manager, Rotorcraft Directorate,  
Aircraft Certification Service.



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**2017-02-11 Alexander Schleicher GmbH & Co.:** Amendment 39-; Docket No. FAA-2016-9382; Directorate Identifier 2016-CE-032-AD.

**(a) Effective Date**

This airworthiness directive (AD) becomes effective March 17, 2017.

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Alexander Schleicher GmbH & Co. ASK 21 gliders, all serial numbers, certificated in any category, that are modified with a rudder hand control system using either ASK 21 Technical Note No. 25, dated February 16, 1993, or ASK 21 Technical Note No. 30, dated January 22, 2007.

**(d) Subject**

Air Transport Association of America (ATA) Code 27: Flight Controls.

**(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 cable slack in gliders equipped with a rudder hand control system. We are issuing this proposed AD to correct any excess slack in the rudder hand control system, which could result in a short-term blockage of the rudder control system and reduced control.

**(f) Actions and Compliance**

Unless already done, do the actions in paragraphs (f)(1) through (4) of this AD:

(1) If the glider is equipped with a rudder actuated by means of a hand lever at the left cockpit wall in the front pilot seat by ASK 21 Technical Note (TN) No. 25, dated February 16, 1993, within the next 60 days after March 17, 2017 (the effective date of this AD), replace the flight manual (FM) and maintenance manual (MM) pages with the following pages in ASK 21 TN No. 38, dated May 31, 2016:

- (i) FM: Check List/1, 16a, 19.1a., and 21.
- (ii) MM: 13, 15.

(2) If the glider is equipped with a rudder actuated by means of a hand lever at the left cockpit wall in the rear pilot seat by ASK 21 TN No. 30, dated January 22, 2007, within the next 60 days after March 17, 2017 (the effective date of this AD), replace the FM and MM pages with the following pages in ASK 21 TN No. 38, dated May 31, 2016:

(i) FM: Check List/1, 16a, 18a, 19b, 19c, 19.1a, and 21.

(ii) MM: 13, 15.

(3) For all affected gliders, within the next 60 days after March 17, 2017 (the effective date of this AD) and repetitively thereafter at intervals not to exceed every 12 months, inspect the rudder cable tension and make any necessary corrections following the instructions from FM page 19.1a, Checking and Adjusting of the Cable Tension, as specified in ASK 21 TN No. 38, dated May 31, 2016.

(4) For all affected gliders, after March 17, 2017 (the effective date of this AD), any glider modified with a rudder hand control system in accordance with ASK 21 TN No. 25 or TN No. 30 must also have the FM and MM amended following the instructions in ASK 21 TN No. 38, dated May 31, 2016.

### **(g) Pilot Authorization**

In addition to the provisions of 14 CFR 43.3 and 43.7, the actions required by paragraph (f)(1) through (2) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the glider records showing compliance with this AD following 14 CFR 43.9 (a)(1) through (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.

### **(h) 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: Jim Rutherford, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4165; fax: (816) 329-4090; email: jim.rutherford@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.

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

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2016-0192, dated September 28, 2016; ASK 21 Technical Note No. 25, dated February 16, 1993; and ASK 21 Technical Note No. 30, dated January 22, 2007, for related information. The MCAI can be found in the AD docket on the Internet at: <https://www.regulations.gov/document?D=FAA-2016-9382-0002>.

### **(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) Alexander Schleicher GmbH & Co. ASK 21 Technical Note No. 38, dated May 31, 2016.

(ii) Reserved.

(3) For Alexander Schleicher GmbH & Co service information identified in this AD, contact Alexander Schleicher GmbH & Co. Segelflugzeugbau, Alexander-Schleicher-Str. 1, D-36163

Poppenhausen, Germany; phone: +49 (0) 06658 89-0; fax: +49 (0) 06658 89-40; Internet: <http://www.alexander-schleicher.de/>; email: [info@alexander-schleicher.de](mailto:info@alexander-schleicher.de).

(4) You may review this referenced 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. In addition, you can access this service information on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2016-9382.

(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 January 19, 2017.

Melvin Johnson,  
Acting Manager, Small Airplane Directorate,  
Aircraft Certification Service.



**DATE: February 9, 2017**

**AD #: 2017-04-51**

Emergency Airworthiness Directive (AD) 2017-04-51 is sent to owners and operators of Safran Helicopter Engines, S.A., Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S and 1S1 turboshaft engines.

### **Background**

This emergency AD was prompted by reports of fuel leaks originating from the drain valve assembly (DV) on certain Arriel engines. Investigation revealed that these fuel leaks were caused by non-compliant diaphragms. This condition, if not corrected, could result in an engine compartment fire, in-flight shutdown, and damage to the helicopter.

### **Relevant Service Information**

We reviewed Safran Helicopter Engines Alert Mandatory Service Bulletin (MSB) A292 73 0851, Version A, dated January 31, 2017. The MSB describes procedures for inspecting, wrapping, and replacing the DV.

### **FAA's Determination**

We are issuing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **AD Requirements**

This AD requires inspection, wrapping, and replacing affected DVs.

### **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.

## **Presentation of the Actual AD**

We are issuing this AD under 49 U.S.C. Section 44701 according to the authority delegated to me by the Administrator.

**2017-04-51 Safran Helicopter Engines, S.A. (Type Certificate previously held by Turbomeca, S.A.):** Directorate Identifier 2017-NE-04-AD.

### **(a) Effective Date**

This Emergency AD is effective upon receipt.

### **(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 and follow the instructions below:

(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.

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

**(k) 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](mailto:robert.green@faa.gov).

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

(3) Safran Helicopter Engines Alert MSB A292 73 0851, Version A, dated January 31, 2017, pertains to the subject of this AD.

(4) For service information referenced 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.

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

Issued in Burlington, Massachusetts, on February 8, 2017.

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