

**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES**

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

BIWEEKLY 2017-21

10/2/2017 - 10/15/2017



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
Biweekly 2017-07			
2017-07-02		Sikorsky Aircraft Corporation	269D and Model 269D Configuration A helicopters

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2017-07-01		M7 Aerospace LLC	SA226-T, SA226-AT, SA226-T(B), SA226-TC, SA227-AC (C-26A), SA227-AT, SA227-BC (C-26A), SA227-CC, SA227-DC (C-26B), and SA227-TT airplanes
2017-06-03	R 81-09-09	Meggitt (Troy), Inc.	921, 930, 937, 940, 944, 945, 977, 978, 979, 8240, 8253, 8259, and 8472 combustion heaters
Biweekly 2017-08			
2017-07-10		American Champion Aircraft Corp.	8KCAB airplanes
2017-05-51		Bell Helicopter Textron Canada	429 helicopters
2017-07-08		Airbus Helicopters Deutschland GmbH	MBB-BK 117 D-2 helicopters
2017-07-09		Sikorsky Aircraft Corporation	S-92A helicopters
Biweekly 2017-09			
2017-08-07		Learjet, Inc	60
2017-08-09		DG Flugzeugbau GmbH	DG-500MB
2017-08-12		GROB Aircraft AG	GROB G 109 and GROB G 109B
2017-09-02		Airbus Helicopters Deutschland GmbH	MBB-BK 117 C-2 and MBB-BK 117 D-2
2017-06-11		Airbus Helicopters	EC120B
Biweekly 2017-10			
2017-09-05		Airbus Helicopters	AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters
2017-09-07		Airbus Helicopters Deutschland GmbH	MBB-BK 117 C-2 helicopters
Biweekly 2017-11			
2017-10-02	S 2015-11-01	Slingsby Aviation Ltd.	T67M260 and T67M260-T3A airplanes
2017-10-03	R 2003-11-12	ZLIN AIRCRAFT a.s.	Z-242L airplanes
2017-10-09		Textron Aviation Inc.	402C, 414A airplanes
2017-10-11		Stemme AG	S10-VT gliders
2017-10-14	S 2014-07-07	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200, and Jetstream Series 3101 airplanes
2017-10-20		Piper Aircraft, Inc.	PA-31, PA-31-300, and PA-31-325; PA-31-350 airplanes
2017-11-03		DG Flugzeugbau GmbH	DG-500MB gliders
Biweekly 2017-12			
2017-10-03	R 2003-11-12	ZLIN AIRCRAFT a.s	Z-242L airplanes
2017-10-14	S 2014-07-07	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200, and Jetstream Series 3101 airplanes
2017-11-08		Diamond Aircraft Industries GmbH	DA 42 airplanes
2017-11-09	R 2017-08-07	Learjet, Inc.	60 airplanes
2017-11-11		NavWorx, Inc.	ADS600-B and ADS600-EXP ADS-B Universal Access Transceiver units
2017-11-16		PILATUS AIRCRAFT LTD.	PC-12/47E airplanes
Biweekly 2017-13			
2017-11-10		Lycoming Engines	TIO-540-AJ1A reciprocating engines
2017-12-04	S 2016-20-04	Airbus Helicopters	SA 341G and Model SA 342J helicopters
2017-13-03		Bell Helicopter Textron Canada Limited	429 helicopters
2017-13-04		Airbus Helicopters Deutschland GmbH	MBB-BK 117 C-2 (including configuration C-2e) and Model MBB-BK 117 D-2 helicopters
Biweekly 2017-14			
2017-13-06		DG Flugzeugbau GmbH	DG-400, DG-500M, DG-500MB, DG-800A, and DG-800B
Biweekly 2017-15			
2017-10-10		Sikorsky Aircraft Corporation	S-92A helicopters
2017-10-12		Airbus Helicopters	AS332C, AS332C1, AS332L, AS332L1, AS332L2, and EC225LP helicopters

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2017-14-04	R 95-26-13	Piper Aircraft, Inc.	PA-28-140, PA-28-150, PA-28-151, PA-28-161, PA-28-160, PA-28-180, PA-28-181, PA-28-235, PA-28-236, PA-28R-180, PA-28R-200, PA-28R-201, PA-28S-160, PA-28S-180, PA-32-260, PA-32-300, PA-32-301, PA-32-301T, PA-32R-300, PA-32R-301 (SP), PA-32R-301 (HP), PA-32R-301T, PA-32RT-300, PA-32RT-300T, and PA-32S-300 airplanes
2017-14-05	S 93-17-13	Airbus Helicopters	SA330J helicopters
2017-14-06		Sikorsky Aircraft Corporation	TH55A, 269A, 269A-1, 269B, 269C and 269C-1 helicopters
2017-15-02		Bell Helicopter Textron, Inc.	212 and 412 helicopters
Biweekly 2017-16			
2017-14-03		Sikorsky Aircraft Corporation	S-92A helicopters
2017-15-05		Piper Aircraft, Inc.	PA-23, PA-23-160, PA-23-235, PA-23-250, PA-E23-250, and PA-30 airplanes
2017-15-06	R 97-10-05	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200 and 3101, and Jetstream Model 3201 airplanes
2017-15-07	R 2017-04-51	Safran Helicopter Engines, S.A.	Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1 turboshaft engines
2017-15-09		Diamond Aircraft Industries GmbH	DA 42 airplanes
2017-15-13		Bell Helicopter Textron Canada Limited	429 helicopters
2017-15-15		R 2002-19-01	SOCATA
2017-16-02		Agusta S.p.A.	A109S helicopters
Biweekly 2017-17			
2017-16-03		Piper Aircraft, Inc.	PA-46-600TP (M600)
2017-16-04		Romtex Anjou Aeronautique (Romtex)	torso restraint systems
2017-16-11		Lycoming Engines	See AD
Biweekly 2017-18			
2017-17-01	S 2014-16-01	Airbus Helicopters	AS332L2 and EC225LP helicopters
2017-17-03		MD Helicopters, Inc.	MD900 helicopters
Biweekly 2017-19			
2017-18-10		Diamond Aircraft Industries GmbH	DA 42, DA 42 M-NG, and DA 42 NG airplanes
2017-18-11		Textron Aviation Inc.	390 airplanes
2017-18-12		R 2016-11-20	B/E Aerospace
2017-18-13	S 2015-22-51	Agusta S.p.A.	A109A and A109A II helicopters
Biweekly 2017-20			
2017-16-01		Ameri-King Corporation	AK-450-() and AK-451-() series emergency locator transmitters
2017-19-15		Technify Motors GmbH	TAE 125-02-99, TAE 125-02-114 reciprocating engines
2017-19-20		General Electric Company	CT7-8A and CT7-9B model turboshaft engines
2017-19-21		Airbus Helicopters	EC225LP helicopters
2017-19-22		R 2014-07-09	British Aerospace Regional Aircraft
Biweekly 2017-21			
2017-18-14	R 2015-02-22	Rolls-Royce Corporation	250-C20, -C20B, -C20F, -C20J, -C20R, -C20R/1, -C20R/2, -C20R/4, -C20W, -C300/A1, and -C300/B1 turboshaft engines
2017-20-13		Piaggio Aero Industries S.p.A.	P-180 airplanes



2017-18-14 Rolls-Royce Corporation: Amendment 39-19023; Docket No. FAA-2011-0961; Product Identifier 2011-NE-22-AD.

(a) Effective Date

This AD is effective October 13, 2017.

(b) Affected ADs

This AD replaces Airworthiness Directive (AD) 2015-02-22, Amendment 39-18090 (80 FR 5452, February 2, 2015).

(c) Applicability

This AD applies to Rolls-Royce Corporation (RRC) 250-C20, -C20B, -C20F, -C20J, -C20R, -C20R/1, -C20R/2, -C20R/4, -C20W, -C300/A1, and -C300/B1 turboshaft engines with either a 3rd-stage turbine wheel, part number (P/N) 23065818, or a 4th-stage turbine wheel, P/N 23055944 or RR30000240, installed.

(d) Subject

Joint Aircraft System Component (JASC) Code 7250, Turbine Section.

(e) Unsafe Condition

This AD was prompted by in-service turbine wheel blade failures that revealed the need for changes to the inspections of certain 3rd-stage turbine wheels and removal from service of certain 4th-stage turbine wheels. We are issuing this AD to prevent failure of the 3rd-stage and 4th-stage turbine wheel blades, damage to the engine, and damage to the aircraft.

(f) Compliance

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

(1) Within 1,775 hours since last visual inspection and fluorescent-penetrant inspection (FPI) or before the next flight after the effective date of this AD, whichever occurs later:

(i) Remove 3rd-stage turbine wheels, P/N 23065818, and perform a visual inspection and an FPI on the removed turbine wheels for cracks at the trailing edge of the turbine blades, near the fillet at the rim.

(ii) Thereafter, re-inspect the affected turbine wheels every 1,775 hours since last inspection (HSLI).

(2) Any time the turbine is disassembled, perform a visual inspection and an FPI on 3rd-stage turbine wheels, P/N 23065818, for cracks at the trailing edge of the turbine blades, near the fillet at the rim.

(3) Do not return to service any turbine wheels found to have cracks at the trailing edge, near the fillet at the rim, of the turbine blades.

(4) Within 1,775 HSLI, or at the next engine shop visit, whichever occurs later, remove 4th-stage turbine wheels, P/N 23055944, from service.

(5) Within 2,025 HSLI, or at the next engine shop visit, whichever occurs later, remove 4th-stage turbine wheels, P/N RR30000240, from service.

(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, except that the separation of engine flanges solely for the purposes of transportation without subsequent engine maintenance does not constitute an engine shop visit.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, FAA, Chicago ACO Branch, Compliance and Airworthiness Division, 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 Branch, 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 John Tallarovic, Aerospace Engineer, FAA, Chicago ACO Branch, Compliance and Airworthiness Division, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-8180; fax: 847-294-7834; email: john.m.tallarovic@faa.gov.

(j) Material Incorporated by Reference

None.

Issued in Burlington, Massachusetts, on August 31, 2017.
Robert J. Ganley,
Manager, Engine and Propeller Standards Branch,
Aircraft Certification Service.



2017-20-13 Piaggio Aero Industries S.p.A.: Amendment 39-19070; Docket No. FAA-2017-0648; Product Identifier 2017-CE-012-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective November 16, 2017.

(b) Affected ADs

None.

(c) Applicability

This AD applies to PIAGGIO AERO INDUSTRIES S.p.A. P-180 airplanes, serial numbers 1002, 1004 through 1220, that are:

- (1) Equipped with flight control surfaces part numbers (P/Ns) and serial numbers (S/Ns) not listed in table 1 of PIAGGIO AERO INDUSTRIES S.p.A. Mandatory Service Bulletin N.: 80-0455, dated: January 13, 2017 (PAI SB No. 80-0455); and
- (2) certificated in any category.

(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 disbonding of the upper and lower metal skin from the honeycomb core on the elevator assembly and other flight control surfaces. We are issuing this AD to prevent structural stiffness of the flight control surface and the downgrade of its aerodynamic characteristics, resulting in reduced control.

(f) Actions and Compliance

Unless already done, do the actions in paragraphs (f)(1) through (8) of this AD. The parts affected by this AD are all left hand (LH) forward flaps, right hand (RH) forward flaps, main wing LH inboard flaps, main wing RH inboard flaps, LH ailerons, RH ailerons, LH elevators, and RH elevators, hereafter referred to as “affected control surface” in this AD.

- (1) Within the next 50 hours time-in-service (TIS) after November 16, 2017 (the effective date of this AD) or within the next 200 hours TIS after the last coin tapping inspection of the affected control surface following PAI Non-Destructive Test Manual (NDTM) 180-MAN-0300-01107, Chapter 51-00-01; whichever occurs later, do a coin tapping inspection of each affected control surface. Repetitively thereafter inspect at the intervals specified in paragraphs (f)(3)(i) and (ii). Follow Part B of the Accomplishment Instructions in PAI SB No. 80-0455.

(i) Do two repetitive inspections at intervals not to exceed 200 hours TIS; and

(ii) Repetitively thereafter inspect at intervals not to exceed 600 hours TIS.

(2) If damage is found during any inspection required in paragraph (f)(1) of this AD, before further flight, repair or replace as necessary each damaged affected control surface following Part B and/or C of the Accomplishment Instructions in PAI SB No. 80-0455.

(3) Within 50 hours TIS after the repair of an affected control surface as required by paragraph (f)(2) of this AD, do a coin tapping inspection of that repaired affected control surface. Repetitively thereafter inspect at the intervals specified in paragraphs (f)(3)(i) and (ii) of this AD. Follow the instructions in PAI SB No. 80-0455.

(i) Do two repetitive inspections at intervals not to exceed 200 hours TIS; and

(ii) Repetitively thereafter inspect at intervals not to exceed 600 hours TIS.

(4) If damage is found during any inspection required in paragraph (f)(3) of this AD, before further flight, repair or replace as necessary each damaged affected control surface following the instructions in Part B and/or C of the Accomplishment Instructions in PAI SB No. 80-0455.

(5) Repair of an affected control surface, as required by paragraph (f)(2) or (4) of this AD, does not constitute terminating action for repetitive inspections as required by this AD for that affected control surface, unless the FAA-approved repair instructions specify otherwise.

(6) Replacement of the affected part on an airplane with a part listed in table 1 of PAI SB No. 80-0455, constitutes terminating action for the repetitive inspections required by this AD for that part.

(7) You may incorporate the actions of PAI SB No. 80-0455, into your FAA-approved airplane inspection program (AIP) or maintenance program (instructions for continued airworthiness) to ensure the continuing airworthiness of each operated airplane.

(8) After November 16, 2017 (the effective date of this AD), you may install on an airplane an affected control surface not listed in table 1 of PAI SB No. 80-0455, provided that before further flight after installation, the affected control surface has been inspected as specified in this AD and found airworthy.

(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: Mike Kiesov, Aerospace Engineer, FAA, Small Airplane Standards Branch, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4144; fax: (816) 329-4090; email: mike.kiesov@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) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, Small Airplane Standards Branch, FAA; or the European Aviation Safety Agency (EASA).

(3) Reporting Requirements: For any reporting requirement in this AD, a federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with a collection of information subject to the requirements of the Paperwork Reduction Act unless that collection of information displays a current valid OMB Control Number. The OMB Control Number for this information collection is 2120-0056. Public reporting for this collection of information is estimated to be approximately 5 minutes per response, including the time for reviewing instructions, completing and reviewing the collection of information. All responses to this collection of information are mandatory. Comments concerning the accuracy of this burden and suggestions for reducing the burden should be directed to the FAA at: 800 Independence Ave. SW., Washington, DC 20591, Attn: Information Collection Clearance Officer, AES-200.

(h) Related Information

Refer to MCAI European Aviation Safety Agency (EASA) AD No.: 2017-0045, dated March 9, 2017 for related information. You may examine the MCAI on the Internet at <https://www.regulations.gov/document?D=FAA-2017-0648-0002>.

(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 this AD specifies otherwise.

(i) PIAGGIO AERO INDUSTRIES S.p.A. Mandatory Service Bulletin (SB) No.: 80-0455, dated January 13, 2017.

(ii) Reserved.

(3) For PIAGGIO AERO INDUSTRIES S.p.A. service information identified in this AD, contact PIAGGIO AERO INDUSTRIES S.p.A.–

Continued Airworthiness, Via Pionieri e Aviatori d'Italia snc–16154 Genova, Italy; Telephone: +39 010 0998046; Fax: None; email: airworthiness@piaggioaerospace.it; Internet: www.piaggioaerospace.it/en/customer-support#care.

(4) You may view this service information at the FAA, Policy and Innovation Division, 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-2017-0648.

(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 September 29, 2017.

Pat Mullen,
Acting Deputy Director, Policy & Innovation Division,
Aircraft Certification Service.