



**FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES
SMALL AIRCRAFT, ROTORCRAFT, GLIDERS,
BALLOONS, & AIRSHIPS**

BIWEEKLY 2010-04

This electronic copy may be printed and used in lieu of the FAA biweekly paper copy.

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SMALL AIRCRAFT, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
Biweekly 2010-01			
2009-26-05		Pilatus Aircraft Ltd	PC-7
2009-26-07	S 2009-12-51	Turbomeca	Engine: Arriel 1A1, 1A2, 1B, 1C, 1C1, 1C2, 1D, 1D1, 1E2, 1K1, 1S, and 1S1
2009-26-08	S 2006-21-12	AeroSpace Technologies of Australia Pty Ltd	N22B, N22S, and N24A
2009-26-12	S 2008-19-05	Engine Components, Inc. (ECi)	See AD
Biweekly 2010-02			
2009-21-08 R1		PIAGGIO AERO INDUSTRIES S.p.A.	P-180
2010-01-03		Fire Fighting Enterprises Limited	See AD
2010-02-01		Turbomeca S.A	Arriel 1B, 1D, and 1D1
2010-02-51	E	AGUSTA S.p.A	A109A, A109A II, A109C, and A109K2
Biweekly 2010-03			
2009-19-51		Agusta S.p.A	AB139 and AW139
2009-26-11	S 2006-07-15	Thrush Aircraft, Inc.	See AD
2010-02-07		Eurocopter France	Rotorcraft: SE3160, SA315B, SA316B, SA316C, and SA319B
2010-02-08		Turbomeca	Engine: Turmo IV A and IV C
2010-03-01		Eurocopter France	Rotorcraft: AS332L1, AS332L2, and EC225LP
2010-03-02		Lifesaving Systems Corp.	Appliance
Biweekly 2010-04			
2009-23-51		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2010-03-03		Bell Helicopter Textron, Inc	Rotorcraft: 205B and 212
2010-03-04		PIAGGIO AERO INDUSTRIES S.p.A	P-180
2010-03-06		Turbomeca	Engine: Arriel 2B and 2B1
2010-03-09		Piaggio Aero Industries S.p.A	P-180



2009-23-51 Sikorsky Aircraft Corporation: Amendment 39-16190. Docket No. FAA-2010-0066; Directorate Identifier 2009-SW-52-AD.

Applicability: Model S-92A helicopters, with main gearbox (MGB) assembly, part number (P/N) 92351-15000-042 or -043, with MGB housing, P/N 92351-15110-042, -043, -044, or -045, installed, certificated in any category.

Compliance: Required as indicated.

To prevent loss of an MGB and subsequent loss of control of the helicopter, do the following:

(a) Within 10 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 10 hours TIS, clean and inspect each MGB assembly mounting foot pad and rib for a crack and corrosion in the area depicted in Figure 1; as shown in the examples in Figures 2, 3, and 4; of Sikorsky Alert Service Bulletin No. 92-63-020, dated September 11, 2009 (ASB). If no crack is found, apply the corrosion preventive compound to each foot pad and rib area.

Note 1: When conducting a visual inspection, use a bright, non-LED light.

(1) If you find a crack, replace the MGB before further flight.

(2) If you find corrosion, bubbled paint, or paint discoloration, before further flight, repair the affected area.

Note 2: Following the ASB Accomplishment Instructions accomplishes the intent of this AD.

(b) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Boston Aircraft Certification Office, ATTN: Michael Schwetz, Aviation Safety Engineer, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7761, fax (781) 238-7170, for information about previously approved alternative methods of compliance.

(c) The Joint Aircraft System/Component (JASC) Code is 6320: Main Rotor Gearbox.

(d) Do the inspections by following the specified portions of Sikorsky Alert Service Bulletin No. 92-63-020, dated September 11, 2009. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Sikorsky Aircraft Corporation, Attn: Manager, Commercial Technical Support, mailstop s581a, 6900 Main Street, Stratford, CT, telephone (203) 383-4866, e-mail address tsslibrary@sikorsky.com, or at <http://www.sikorsky.com>. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas, or 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/code_of_federal_regulations/ibr_locations.html.

(e) This amendment becomes effective on February 19, 2010, to all persons except those persons to whom it was made immediately effective by Emergency AD 2009-23-51, issued October 29, 2009, which contained the requirements of this amendment.

Issued in Fort Worth, Texas, on December 18, 2009.
Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-03-03 Bell Helicopter Textron, Inc.: Amendment 39-16186. Docket No. FAA-2010-0065; Directorate Identifier 2009-SW-01-AD.

Applicability: Serial-numbered Model 205B and Model 212 helicopters, with the specified part-numbered main rotor (M/R) blade that is listed in Table 1 of this AD installed, certificated in any category.

Table 1

Helicopter Model and Serial Number (S/N)	M/R Blade P/N
Model 205B: S/N 30066, 30166, 30188, or 30297	P/N 212-015-501-005, -111, -113, -115, -117, -119, or -121
Model 212: S/N 30502 through 30603, 30611 through 30999, 31101 through 31311, 32101 through 32262, or 35001 through 35103	P/N 212-015-501-005, -111, -113, -115, -117, -119, or -121

Compliance: Required as indicated.

To detect an edge void, corrosion, or a crack on a M/R blade, which could lead to loss of the M/R blade and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 25 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 100 hours TIS:

(1) Wash the upper and lower surfaces of the M/R blade with a solution of cleaning compound (C-318) and water. Rinse thoroughly and wipe dry.

(2) Using a 3x power or higher magnifying glass, on each affected M/R blade, in an area from blade stations 24.5 to 40, including the entire width of the M/R blade chord, as depicted in Figure 1 in Bell Helicopter Alert Service Bulletin No. 205B-08-51 for the Model 205B helicopters, or No. 212-08-130 for the Model 212 helicopters, both Revision A, dated January 13, 2009 (ASBs), as applicable:

(i) Visually inspect the upper and lower grip plates and doublers of the M/R blade in the specified area for an edge void, corrosion, or a crack.

(ii) Visually inspect the remaining upper and lower surfaces of the M/R blade in the specified area for any corrosion or a crack.

Note 1: The inspections required by paragraphs (a)(2)(i) and (a)(2)(ii) of this AD can be accomplished with the M/R blade installed on the helicopter.

Note 2: Crack indications on an actual M/R blade are shown in Figure 2 of both ASBs.

(3) Apply a light coat of preservative oil (C-125) to all surfaces of the M/R blade in the specified area.

(b) Before further flight:

(1) If any corrosion or an edge void is found, replace the M/R blade with an airworthy M/R blade, or repair the M/R blade if the damage is within the maximum repair damage limits.

(2) If a crack is found in the M/R blade paint finish, remove the paint in the affected area by lightly sanding with 180-220 grit paper in a span wise direction to determine if the grip plate, doubler, or skin is cracked. Do not remove any parent material of the M/R blade during the sanding operation. Refinish the sanded area.

(3) If a crack is found in any part of the M/R blade other than the paint finish, replace the M/R blade with an airworthy M/R blade.

(4) If any parent material is removed during the sanding operation required by paragraph (b)(2) of this AD, replace the M/R blade with an airworthy M/R blade, or repair the M/R blade if the amount of parent material removed is within the maximum repair damage limits.

Note 3: The maximum repair damage limitations specified in paragraphs (b)(1) through (b)(4) of this AD are contained in the applicable Component and Repair Overhaul Manual.

(c) To request a different method of compliance or a different compliance time for this AD, follow the procedures in 14 CFR 39.19. Contact the Manager, Rotorcraft Certification Office, ATTN: Michael Kohner, Aviation Safety Engineer, FAA, Rotorcraft Directorate, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5170, fax (817) 222-5783, for information about previously approved alternative methods of compliance.

(d) The inspections and replacements, if necessary, shall be done in accordance with the specified portions of Bell Helicopter Alert Service Bulletin No. 205B-08-51 for Model 205B helicopters, or No. 212-08-130 for Model 212 helicopters, both Revision A, dated January 13, 2009, as applicable. The Director of the Federal Register approved this incorporation by reference in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Bell Helicopter Textron, Inc., P.O. Box 482, Fort Worth, TX 76101, telephone (817) 280-3391, fax (817) 280-6466, or at <http://www.bellcustomer.com/files/>. Copies may be inspected at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas or 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/code_of_federal_regulations/ibr_locations.html.

Joint Aircraft System/Component (JASC) Code

(e) JASC Code 6210: Main Rotor Blades.

(f) This amendment becomes effective on February 19, 2010.

Issued in Fort Worth, Texas, on December 21, 2009.

Scott A. Horn,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-03-04 PIAGGIO AERO INDUSTRIES S.p.A.: Amendment 39-16187; Docket No. FAA-2009-1081; Directorate Identifier 2009-CE-058-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective March 11, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Model PIAGGIO P-180 airplanes, all serial numbers through 1180, certificated in any category.

Subject

- (d) Air Transport Association of America (ATA) Code 24: Electric Power.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

An operator reported a short circuit between a generator power cable and an anti-ice shutoff valve, which was caused by chafing between the cable and the valve; the insulation of the cable and surrounding sleeve were worn off.

An investigation revealed that a scarce clearance between the cables and adjacent parts, together with vibrations of generator power cables favoured by insufficient clamping, was the root cause of the damage.

If left uncorrected, this situation could lead to short circuits with possible fire and/or loss of important aircraft systems.

This Airworthiness Directive (AD) requires an inspection to detect damaged cables/sleeves, and replacement/repair as necessary; in addition, this AD requires to ensure that acceptable minimum clearances between cables and parts exist, and to improve clamping to minimize vibrations of the cables.

Actions and Compliance

(f) Unless already done, do the following actions:

(1) Within 3 months after March 11, 2010 (the effective date of this AD), inspect for minimum clearance and insulation damage to the generator power cables in accordance with Part A of the ACCOMPLISHMENT INSTRUCTIONS of PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: 80-0271, dated May 18, 2009.

(2) If, as a result of the inspection required by paragraph (f)(1) of this AD, any discrepancy (inadequate clearance or insulation damage) is found, before further flight, do all necessary corrective actions in accordance with Part B of the ACCOMPLISHMENT INSTRUCTIONS of PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: 80-0271, dated May 18, 2009.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) 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: Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; fax: (816) 329-4090. 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.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI European Aviation Safety Agency AD No.: 2009-0212, dated October 6, 2009; and PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: 80-0271, dated May 18, 2009, for related information.

Material Incorporated by Reference

(i) You must use PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: 80-0271, dated May 18, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Piaggio Aero Industries S.p.a., Via Cibrario, 4-16154 Genoa, Italy; telephone +39 010 06481 741; fax: +39 010 6481 309; Internet: <http://www.piaggioaero.com>, or e-mail: MMicheli@piaggioaero.it.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD 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/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on January 21, 2010.

James E. Jackson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



2010-03-06 Turbomeca: Amendment 39-16189. Docket No. FAA-2009-0889; Directorate Identifier 2009-NE-35-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective March 11, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Turbomeca Arriel 2B and 2B1 turboshaft engines that have not incorporated Modification TU 147. These engines are installed on, but not limited to, Eurocopter AS 350 B3 and EC 130 B4 helicopters.

Reason

- (d) This AD results from mandatory continuing airworthiness information (MCAI) issued by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. We are issuing this AD to prevent a forced autorotation landing or an accident.

Actions and Compliance

- (e) Unless already done, do the following actions.
 - (1) Within 550 engine flight hours from the effective date of this AD, check the transmissible torque between the low-pressure (LP) pump impeller and the high-pressure (HP) pump shaft of the HP/LP pump metering unit (HMU). Use paragraph 2 of the Instructions to be Incorporated of Turbomeca Mandatory Service Bulletin No. A292 73 2830, Version B, dated July 10, 2009, to do the check.
 - (2) If the check is compliant, apply the nominal tightening torque to the screw of the LP pump impeller.
 - (3) If the check is not compliant, replace the HP/LP pump HMU with a unit that has not incorporated Modification TU 147 but has passed the check, or with a unit that has incorporated Modification TU 147.

FAA AD Differences

- (f) This AD differs from the MCAI and/or service information as follows:

(1) The MCAI requires the checking of the transmissible torque between the LP pump impeller and the HP pump shaft within 550 engine flight hours from the effective date of the AD, but no later than June 30, 2010.

(2) This AD requires the checking of the transmissible torque between the LP pump impeller and the HP pump shaft within 550 engine flight hours from the effective date of this AD.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Engine Certification Office, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19.

Related Information

(h) Refer to MCAI European Aviation Safety Agency Airworthiness Directive 2009-0184, dated August 14, 2009, for related information.

(i) Contact James Lawrence, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: james.lawrence@faa.gov; telephone (781) 238-7176; fax (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(j) You must use Turbomeca Mandatory Service Bulletin No. A292 73 2830, Version B, dated July 10, 2009, to do the transmissible torque check required by this AD.

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

(2) For service information identified in this AD, contact Turbomeca, 40220 Tarnos, France; telephone (33) 05 59 74 40 00, fax (33) 05 59 74 45 15.

(3) You may review copies at the FAA, New England Region, 12 New England Executive Park, Burlington, MA; or 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 January 21, 2010.
Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-03-09 Piaggio Aero Industries S.p.A.: Amendment 39-16193; Docket No. FAA-2009-1116; Directorate Identifier 2009-CE-061-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective March 11, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Model PIAGGIO P-180 airplanes, manufacturer's serial numbers 1106 through 1189, certificated in any category.

Subject

- (d) Air Transport Association of America (ATA) Code 53: Fuselage.

Reason

- (e) The mandatory continuing airworthiness information (MCAI) states:

Cracks have been detected on the upper flange (cap) of several "0" pressure bulkheads on the production line; none of the cracks had spread across the thickness of material.

Investigation revealed that all "0" pressure bulkheads installed on aircraft from MSN 1106 up to 1189 could have the same cracks.

Although calculations confirm the low stress level in that area, a reinforcement of the "0" pressure bulkhead is suggested to avoid crack growth and the eventual failure of the bulkhead.

For the reasons stated above, this new Airworthiness Directive (AD) mandates a non-destructive inspection and a reinforcement—by installation of doublers—of the "0" pressure bulkhead. This AD also includes a reporting requirement of the inspection results.

Actions and Compliance

(f) Unless already done, do the following actions:

(1) As of March 11, 2010 (the effective date of this AD), before or when the airplane reaches a total of 3,600 hours time-in-service or within the next days 30 after the effective date of the AD, whichever occurs later, inspect the "0" pressure bulkhead for cracks using a dye-penetrant inspection method. Do the inspection in accordance with Part A of the Accomplishment Instructions in PIAGGIO AERO INDUSTRIES S.p.A Service Bulletin (Mandatory) N.: SB-80-0267Rev.0, dated May 19, 2009; or PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: SB-80-0267Rev.1, dated June 16, 2009.

(2) Before further flight after the inspection required in paragraph (f)(1) of this AD (whether or not cracks were found), install doublers on the "0" pressure bulkhead. Do the modification in accordance with Part B and Part C of the Accomplishment Instructions in PIAGGIO AERO INDUSTRIES S.p.A Service Bulletin (Mandatory) N.: SB-80-0267Rev.0, dated May 19, 2009; or PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: SB-80-0267Rev.1, dated June 16, 2009.

(3) Within 30 days after doing the inspection required in paragraph (f)(1) of this AD, report all inspection results, negative or positive, to Piaggio Aero Industries S.p.a., Via Cibrario, 4-16154 Genoa, Italy; fax: +39 010 6481 881; e-mail: airworthiness@piaggioaero.it.

FAA AD Differences

Note: This AD differs from the MCAI and/or service information as follows: No differences.

Other FAA AD Provisions

(g) 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: Sarjapur Nagarajan, Aerospace Engineer, FAA, Small Airplane Directorate, 901 Locust, Room 301, Kansas City, Missouri 64106; telephone: (816) 329-4145; fax: (816) 329-4090. 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.

(3) Reporting Requirements: For any reporting requirement in this AD, under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.), the Office of Management and Budget (OMB) has approved the information collection requirements and has assigned OMB Control Number 2120-0056.

Related Information

(h) Refer to MCAI European Aviation Safety Agency (EASA) AD No. 2009-0211, dated October 6, 2009; PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: SB-80-0267Rev.0, dated May 19, 2009; and PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: SB-80-0267Rev.1, dated June 16, 2009, for related information.

Material Incorporated by Reference

(i) You must use PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: SB-80-0267Rev.0, dated May 19, 2009; and PIAGGIO AERO INDUSTRIES S.p.A. Service Bulletin (Mandatory) N.: SB-80-0267Rev.1, dated June 16, 2009, to do the actions required by this AD, unless the AD specifies otherwise.

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

(2) For service information identified in this AD, contact Piaggio Aero Industries S.p.a., Via Cibrario, 4-16154 Genoa, Italy; fax: +39 010 6481 881; e-mail: airworthiness@piaggioaero.it.

(3) You may review copies of the service information incorporated by reference for this AD at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the Central Region, call (816) 329-3768.

(4) You may also review copies of the service information incorporated by reference for this AD 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/code_of_federal_regulations/ibr_locations.html.

Issued in Kansas City, Missouri, on January 26, 2010.

John Colomy,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.