FEDERAL AVIATION ADMINISTRATION
AIRWORTHINESS DIRECTIVES

SMALL AIRPLANES, ROTORCRAFT, GLIDERS, BALLOONS, & AIRSHIPS

BIWEEKLY 2013-02

1/14/2013 - 1/27/2013

Federal Aviation Administration
Engineering Procedures Office, AIR-110
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AD No.	Information	Manufacturer	Applicability
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

2012-17-08 Bell Helicopter Textron, Inc. (Bell): Amendment 39-17171; Docket No. FAA-2011-1188; Directorate Identifier 2008-SW-46-AD.

(a) Applicability

This AD applies to Model 204B, 205A, 205A-1, 205B, and 212 helicopters, with a main rotor yoke (yoke), part number (P/N) AAI-4011-102 (all dash numbers), ASI-4011-102 (all dash numbers), or 204-011-102 (all dash numbers), installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as a crack in a yoke. This condition could result in failure of a yoke, and subsequent loss of control of the helicopter.

(c) Affected ADs

This AD supersedes AD 93-05-01, Amendment 39-8507 (58 FR 13700, March 15, 1993); AD 81-19-02, Amendment 39-4208 (46 FR 45595, September 14, 1981; AD 81-19-01, Amendment 39-4207 (46 FR 45595, September 14, 1981); and AD 79-20-05, Amendments 39-3662 (45 FR 6922, January 31, 1980), 39-3626 (44 FR 70123, December 6, 1979), and 39-3572 (44 FR 55556, September 27, 1979).

(d) Effective Date

This AD becomes effective February 27, 2013.

(e) 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.

(f) Required Actions

(1) For helicopters with yoke, P/N AAI-4011-102 (all dash numbers) and ASI-4011-102 (all dash numbers), installed, within 100 hours time-in-service (TIS):

(i) Create a component history card or equivalent record for each yoke.

(ii) Determine the model for each helicopter on which the yoke has been installed from the time the yoke had zero hours TIS.

(iii) In accordance with the rate per hour categories shown in Table 1 to paragraph (f) of this AD, categorize the accumulated "Factored Hours TIS" on each yoke by determining the types of operation AND the rate per hour of external load lifts for each hour TIS accumulated on each yoke. One external load lift occurs each time the helicopter picks up an external load and drops it off. For determining the proper rate per hour category for external load operations, any external load lift in which the helicopter achieves a vertical altitude difference of greater than 200 feet indicated altitude between the pickup and drop-off point counts as two external load lifts.

Table 1 to Paragraph (f)–Factored Hours TIS for a Yoke
[Number of unfactored hours TIS and factored hours TIS are examples for illustration purposes only]

Helicopter model	Types of operation	Rate per hour of external load lifts and takeoffs	Unfactored hours TIS	Hours TIS factor	Factored hours TIS on yoke (unfactored hours TIS × hours TIS factor)
Yokes installed on any Model 204B, 205A, or 205A–1 helicopter.	All Operations	All	120	1	120
Yokes installed on any Model 205B or 212 helicopter.	External Load Operations	1 to 5	105	1	105
		5.1 to 8		1 .5	
		8.1 to 12		2	
		12.1 to 18		3	
		18.1 to 32	170	5	850
		32.1 to 48		7	
		more than 48		9	
		Unknown	50	7	350
	Internal Load Operations	All Takeoffs	2,025	1	2,025
Total Factored Hours TIS on Yoke (Summation of the Factored Hours TIS)					3,450

(iv) By reference to Table 1 to paragraph (f) of this AD, enter the "Unfactored Hours TIS" for each category as determined by paragraph (f)(1)(iii) of this AD. Calculate the "Factored Hours TIS" by multiplying the "Unfactored Hours TIS" by the "Hours TIS Factor." Determine the accumulated "Total Factored Hours TIS" on each yoke by adding the factored hours TIS for each type of operation and helicopter model. Tracking the Total Factored Hours TIS is only for establishing a retirement life and not for tracking inspection intervals.

(v) Record the accumulated Total Factored Hours TIS on the component history card or equivalent record for each yoke.

(vi) Continue to factor the hours TIS for each yoke by following paragraph (f)(1)(ii) through (f)(1)(iv) of this AD, and record the additional factored hours TIS on the component history card or equivalent record.

(2) For helicopters with yoke, P/N 204-011-102 (all dash numbers), installed, before further flight:

(i) For hours TIS accumulated before the effective date of this AD, calculate and record the Total Factored Hours TIS as follows:

(A) For the Model 212 helicopters, 1 hour TIS in which passenger or internal cargo was carried equals 1 factored hour TIS; 1 hour TIS where more than 4 external load lifts occurred equals 5 factored hours TIS.

(B) For the Model 204 and 205 series helicopters, 1 hour TIS equals 1 factored hour TIS.

(ii) For hours TIS accumulated after the effective date of this AD, calculate and record the factored hours TIS on the yoke in accordance with the requirements of paragraphs (f)(1)(i) thorough (f)(1)(vi) of this AD.

(3) Revise the Airworthiness Limitations section of the applicable maintenance manuals or the Instructions for Continued Airworthiness (ICAs) by establishing a new retirement life of 3,600 Total Factored Hours TIS for each yoke, P/N AAI-4011-102 (all dash numbers), ASI-4011-102 (all dash numbers), or 204-011-102 (all dash numbers), by making pen and ink changes or inserting a copy of this AD into the Airworthiness Limitations section of the maintenance manual or ICAs.

(4) Record a life limit of 3,600 Total Factored Hours TIS for each yoke, P/N AAI-4011-102 (all dash numbers), ASI-4011-102 (all dash numbers), or 204-011-102 (all dash numbers), on the component history card or equivalent record.

(5) Within 100 hours TIS or 600 hours TIS since the last magnetic particle inspection (MPI) of the yoke, whichever occurs later, and thereafter at intervals not to exceed 600 hours TIS, for any yoke installed on any Model 205B or 212 helicopter:

(i) Remove the yoke from the main rotor hub assembly (hub). Using a 5-power or higher magnifying glass, visually inspect each pillow block bushing hole, spindle radius, and center section web for any corrosion or mechanical damage.

(ii) Perform an MPI of each yoke for a crack.

(6) Within 100 hours TIS or 2,400 hours TIS since the last MPI of the yoke, whichever occurs later, and thereafter at intervals not to exceed 2,400 hours TIS, for any yoke installed on any Model 204B, 205A, or 205A-1 helicopter:

(i) Remove the yoke from the hub. Using a 5-power or higher magnifying glass, visually inspect each pillow block bushing hole, spindle radius, and center section web for any corrosion or mechanical damage.

(ii) Perform an MPI of each yoke for a crack.

(7) Before further flight, replace each yoke with an airworthy yoke if:

(i) The yoke has 3,600 or more Total Factored Hours TIS; or

(ii) The Total Factored Hours TIS for the yoke is unknown and cannot be determined; or

(iii) The yoke has any corrosion or mechanical damage that exceeds any of the maximum repair damage limits; or

(iv) The yoke has a crack.

(g) Special Flight Permits

Special flight permits may only be issued under 14 CFR 21.197 and 21.199 for the purpose of operating the helicopter to a location where the MPI requirements of paragraphs (f)(5) or (f)(6) of this AD can be performed.

(h) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Rotorcraft Certification Office, FAA, may approve AMOCs for this AD. Send your proposal to: Michael Kohner, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, TX 76137; telephone (817) 222-5170; email 7-avs-asw-170@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.

(i) Additional Information

Bell Alert Service Bulletin Nos. 204-92-36, 205-92-51, and 212-92-80, all dated October 23, 1992, which are not incorporated by reference, contain additional information about the subject of this AD. For service information identified in this AD, contact 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/. You may review a copy of this service information at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

(j) Subject

Joint Aircraft Service Component (JASC) Code: 6220: Main Rotor Head.

Issued in Fort Worth, Texas, on December 21, 2012.
Lance T. Gant,
Acting Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.

CORRECTION: Federal Register Volume 78, Number 9 (Monday, January 14, 2013); Pages 2615-2616.

2012-24-09 Lycoming Engines and Continental Motors, Inc. Reciprocating Engines: Amendment 39-17279; Docket No. FAA-2012-1245; Directorate Identifier 2012-NE-41-AD.

(a) Effective Date

This AD is effective December 20, 2012.

(b) Affected ADs

None.

(c) Applicability

This AD applies to Lycoming Engines TIO-540-AK1A, and Continental Motors, Inc. TSIO-360-MB, TSIO-360-SB, and TSIO-360-RB reciprocating engines with any of the following turbochargers installed:

(1) Hartzell Engine Technologies (HET) model TA0411 turbochargers, part numbers (P/Ns) 466642-0001; 466642-0002; 466642-0006; 466642-9001; 466642-9002; and 466642-9006, with serial numbers (S/Ns) listed in Table 2 of HET Alert Service Bulletin No. 048, dated November 16, 2012, installed.

(2) HET model TA0411 turbochargers having a turbine wheel, P/N 410188-0019, with any of the turbine wheel S/Ns H120716 through H121988, installed.

(3) HET model TA0411 turbochargers overhauled or repaired since August 29, 2012, using a turbine wheel, P/N 410188-0019, with any of the turbine wheel S/Ns H120716 through H121988, installed.

(d) Unsafe Condition

This AD was prompted by a report of a turbocharger turbine wheel that failed a static strength test at its manufacturing facility. We are issuing this AD to prevent turbocharger turbine wheel failure, reduction or complete loss of engine power, loss of engine oil, oil fire, and damage to the airplane.

(e) Compliance

Before further flight, remove from service the turbochargers identified in paragraph (c) of this AD, unless already done.

(f) Special Flight Permits

Special flight permits are permitted provided that:

(1) The flight is limited to three hours.

(2) The turbocharger boost is set to "Off" in the cockpit (if applicable).
(3) The wastegate for the turbocharger is safety wired in the locked open position.

(g) Alternative Methods of Compliance (AMOCs)

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

(h) Related Information

For more information about this AD, contact Christopher Richards, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, 2300 E. Devon Ave., Des Plaines, IL 60018; phone: 847-294-7156; fax: 847-294-7834; email: christopher.j.richards@faa.gov.

(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) Hartzell Engine Technologies Alert Service Bulletin No. 048, dated November 16, 2012.
(ii) Reserved.
(3) For service information identified in this AD, contact Hartzell Engine Technologies, LLC, 2900 Selma Highway, Montgomery, AL 36108, phone: 334-386-5400; fax: 334-386-5450; internet: http://www.hartzellenginetech.com.
(4) You may view this service information at the FAA, 12 New England Executive Park, 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 November 29, 2012.
Colleen M. D'Alessandro,
Assistant Manager, Engine & Propeller Directorate, Aircraft Certification Service.

2013-01-06 PILATUS Aircraft Ltd.: Amendment 39-17320; Docket No. FAA-2013-0025; Directorate Identifier 2012-CE-048-AD.

(a) Effective Date

This airworthiness directive (AD) becomes effective February 7, 2013.

(b) Affected ADs

None.

(c) Applicability

This AD applies to PILATUS Aircraft Ltd. Models PC-7 airplanes, serial numbers 101 through 618, certificated in any category.

(d) Subject

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

(e) Reason

This AD was prompted by mandatory continuing airworthiness information (MCAI) issued by the aviation authority of another country to identify and correct an unsafe condition on an aviation product. We are issuing this AD to detect and correct cracks in the engine mount fittings.

(f) Actions and Compliance

Unless already done, do the following actions.

(1) Within the next 90 days after February 7, 2013 (the effective date of this AD), perform a conductivity test to identify the material specification of the engine mount fittings (part number (P/N) 112.35.07.152) following paragraph 3.B. of PILATUS Aircraft Ltd. PILATUS PC-7 Service Bulletin No. 53-008, dated November 30, 2012.

(2) If during the conductivity test required by paragraph (f)(1) of this AD, engine mount fittings made of aluminum alloy AA2024-T351 are found, within the next 90 days after February 7, 2013 (the effective date of this AD), do the inspection following paragraph 3.C. of PILATUS Aircraft Ltd. PILATUS PC-7 Service Bulletin No. 53-008, dated November 30, 2012.

(3) If during the inspection required by paragraph (f)(2) of this AD, any crack is found in the engine mount fittings, before further flight, contact Pilatus Customer Technical Support (MCC) for further instructions at P.O. Box 992, CH-6371 Stans, Switzerland; telephone: +41 (0)41 619 67 74; fax: 41 (0)41 619 67 73; Internet: http://www.pilatus aircraft.com or email: Techsupport@pilatus-aircraft.com.

(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.

(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 Swiss MCAI Federal Office of Civil Aviation (FOCA) AD HB-2012-009, dated December 20, 2012; and PILATUS Aircraft Ltd. PILATUS PC-7 Service Bulletin No. 53-008, dated November 30, 2012, for related information.

(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) PILATUS Aircraft Ltd. PILATUS PC-7 Service Bulletin No. 53-008, dated November 30, 2012.

(ii) Reserved.

(3) For PILATUS Aircraft Ltd. service information identified in this AD, contact PILATUS AIRCRAFT LTD., Customer Technical Support (MCC), P.O. Box 992, CH-6371 Stans, Switzerland; telephone: +41 (0)41 619 67 74; fax: 41 (0)41 619 67 73; Internet: http://www.pilatus aircraft.com or email: Techsupport@pilatus-aircraft.com.

(4) You may view this service information at 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/index.html.

Issued in Kansas City, Missouri, on January 11, 2013.

John Colomy,

Acting Manager, Small Airplane Directorate, Aircraft Certification Service.

2013-02-01 Bell Helicopter Textron Canada Limited (Bell): Amendment 39-17322; Docket No. FAA-2013-0022; Directorate Identifier 2012-SW-004-AD.

(a) Applicability

This AD applies to Bell Model 206L, 206L-1, and 206L-3 helicopters, all serial numbers (S/N), and Model 206L-4 helicopters, S/Ns 52001 through 52430, with a hydraulic servo actuator assembly (servo), part number (P/N) 206-076-062-103, installed, certificated in any category.

(b) Unsafe Condition

This AD defines the unsafe condition as loose or misaligned parts of the servo. This condition could result in failure of the servo and subsequent loss of control of the helicopter.

(c) Effective Date

This AD becomes effective February 7, 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 Actions

Before further flight, for each servo:

(1) Retract the boot as depicted in Figure 1 of Bell Alert Service Bulletin (ASB) No. 206L-11-169, Revision B, dated August 29, 2011 (ASB).

(2) Applying only hand pressure, determine whether the nut, shaft, and clevis assembly turn independently from each other.

(i) If the shaft turns independently of the nut or the clevis assembly, before further flight, replace the servo with an airworthy servo.

(ii) If the shaft does not turn independently of the nut or the clevis assembly, inspect to determine whether at least one tab of the lock washer (tab) is aligned with and bent flush against a flat surface of the nut and whether at least one tab is aligned with and bent flush against a flat surface of the clevis assembly.

(A) If at least one tab is aligned with and bent flush against a nut flat surface and at least one tab is aligned with and bent flush against a flat surface of the clevis assembly, for any tab that is not bent flush against either a flat surface of the nut or clevis assembly, bend it flush against a flat surface.

(B) If at least one tab is not aligned with and bent flush against a nut flat surface and at least one tab is not aligned with and bent flush against a flat surface of the clevis assembly, before further flight, replace the servo with an airworthy servo.

(3) Re-identify the servo by metal-impression stamping or by vibro-etching the letter "V" at the end of P/N 206-076-062-103V on the identification plate.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Group, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Wilbanks, Aviation Safety Engineer, Rotorcraft Certification Office, Rotorcraft Directorate, FAA, 2601 Meacham Blvd., Fort Worth, Texas 76137; telephone (817) 222-5110; email matt.wilbanks@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

The subject of this AD is addressed in Transport Canada Civil Aviation AD CF-2011-19R1, Revision 1, dated December 7, 2011.

(h) 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) Bell ASB No. 206L-11-169, Revision B, dated August 29, 2011.

(ii) Reserved.

(3) For Bell service information identified in this AD, contact Bell Helicopter Textron Canada Limited, 12,800 Rue de l'Avenir, Mirabel, Quebec J7J1R4; telephone (450) 437-2862 or (800) 363-8023; fax (450) 433-0272; or at http://www.bellcustomer.com/files/.

(4) You may view this service information at FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. 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.

(i) Subject

Joint Aircraft Service Component (JASC) Code: 6730 Rotorcraft Servo System.

Issued in Fort Worth, Texas, on January 9, 2013.
Kim Smith,
Directorate Manager, Rotorcraft Directorate, Aircraft Certification Service.