



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

BIWEEKLY 2010-11

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

U.S. Department of Transportation
Federal Aviation Administration
Regulatory Support Division
Delegation and Airworthiness Programs Branch, AIR-140
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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
Biweekly 2010-05			
2010-04-05	S 2003-12-05	McCaughey Propeller Systems	Propeller: 1A103/TCM
2010-04-06		Thielert Aircraft Engines GmbH	Engine: TAE 125-01
2010-04-07		Turbomeca	Engine: Arriel 2S1
2010-04-11		Extra Flugzeugproduktions- und Vertriebs- GmbH	EA-300/200, EA-300/L
2010-04-14		Augustair, Inc	2150, 2150 ^a , 2180
2010-04-15		SCHEIBE-Flugzeugbau GmbH	Glider: SF 25C
2010-04-16		SICLI	Appliance: portable fire extinguishers
2010-05-02	S 2009-08-10	Pilatus Aircraft Ltd	PC-12/47E
2010-05-51	E	Eurocopter	Rotorcraft: EC120B
Biweekly 2010-06			
2010-05-10		Hawker Beechcraft	B300, B300C
2010-06-02		Hawker Beechcraft	G58

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AD No.	Information	Manufacturer	Applicability
Info: E - Emergency; COR - Correction; S - Supersedes; R - Revision; - See AD for additional information;			
Biweekly 2010-07			
2010-06-03		Eurocopter France	Rotorcraft: AS355E, AS355F, AS355F1, AS355F2, and AS355N
2010-06-06	S 99-16-13	MD Helicopters, Inc	Rotorcraft: MD-900
2010-06-07		Eurocopter France	Rotorcraft: AS 332 C, L, L1, and L2; AS 350 B3; AS355 F, F1, F2, and N; SA 365N and N1; AS 365 N2 and N3; SA 366G1; EC 130 B4; and EC 155B and B1
2010-06-08		Sikorsky Aircraft Corporation	Rotorcraft: S-76C
2010-06-11		Honeywell International Inc.	Engine: TFE731-2, TFE731-2A, TFE731-2C, TFE731-3, TFE731-3A, TFE731-3AR, TFE731-3B, TFE731-3BR, TFE731-3C, TFE731-3CR, TFE731-3D, TFE731-3DR, TFE731-3R, TFE731-4, TFE731-4R, TFE731-5, TFE731-5AR, TFE731-5BR, and TFE731-5R
2010-06-12		Thielert Aircraft Engines GmbH	Engine: TAE 125-01 and TAE 125-02-99
Biweekly 2010-08			
2009-08-08 R1	R 2010-08-08	Turbomeca S.A	Engine: Arriel 1B, 1D, and 1D1, Arriel 2B and 2B1
2010-07-02	S 2006-22-05	Honeywell, Inc	Appliance: See AD
2010-07-07		Socata	TBM 700
2010-07-08		Kelly Aerospace Energy Systems, LLC	Appliance: See AD
2010-08-01		Aircraft Industries a.s	Glider: L 23 Super Blanik
Biweekly 2010-09			
2009-08-05R1	R	Liberty Aerospace Incorporated	XL-2
2010-08-04	2007-10-14	British Aerospace Regional Aircraft	HP.137 Jetstream Mk.1, Jetstream Series 200, Jetstream Series 3101, and Jetstream Model 3201
2010-09-08		General Electric Company	Engine: GE CJ610 series turbojet and CF700
Biweekly 2010-10			
2010-05-51	FR	Eurocopter France	Rotorcraft: EC120B
2010-09-01		Eurocopter France	Rotorcraft: AS350B, BA, B1, B2, B3, C, D and D1; and AS 355E, F, F1, F2, N, and NP
2010-09-02		British Aerospace Regional Aircraft	Jetstream Series 3101 and Jetstream Model 3201
2010-09-04		Honeywell International Inc	Appliance: Primus EPIC and Primus APEX flight management systems (FMS)
2010-09-09		Piaggio Aero Industries S.p.A.	P-180
2010-09-13		Turbomeca	Engine: Makila 2A
2010-10-01	S 2009-05-01	GA 8 Airvan (Pty) Ltd	Glider: GA8 and GA8-TC320
Biweekly 2010-11			
2010-10-02		Sikorsky Aircraft Corporation	Rotorcraft: S-76A, B, and C
2010-10-03		Sikorsky Aircraft Corporation	Rotorcraft: S-92A
2010-10-09	S 2008-07-01	Turbomeca	Engine: 1B (that incorporate Turbomeca Modification (mod) TU 148), Arriel 1D, 1D1, and 1S1
2010-10-10		Hawker Beechcraft	390
2010-10-14		Eurocopter France	Rotorcraft: AS332L2
2010-10-15		Eurocopter France	Rotorcraft: AS332L1 and AS332L2
2010-11-51	E	Eurocopter France	Rotorcraft: AS350B, BA, B1, B2, C, D, and D1 helicopters and Model AS355E, F, F1, F2, and N
2010-11-52	E	Sikorsky Aircraft	Rotorcraft: S-76A, B, and C



2010-10-02 Sikorsky Aircraft Corporation: Amendment 39-16281. Docket No. FAA-2006-24587; Directorate Identifier 2006-SW-05-AD.

Applicability: Model S-76A, B, and C helicopters, with a main rotor servo actuator (servo actuator), Sikorsky Aircraft Corporation (Sikorsky) part number (P/N) 76650-09805-109 or -110 (also marked as HR Textron or Woodward HRT P/N 3006760-109 or -110), installed, certificated in any category.

Compliance: Required as indicated, unless accomplished previously.

To detect leaking in a servo actuator, which could lead to degraded servo actuator performance and subsequent loss of control of the helicopter, do the following:

(a) For a servo actuator with 1,500 or less hours time since new (TSN) or time since overhaul (TSO), determine the leakage rate on or before reaching 1,500 hours TSN or TSO. This 1,500 hour TSN or TSO inspection revises the airworthiness limitations section of the applicable maintenance manual.

(b) For a servo actuator with 2,250 or less hours TSN or TSO, but more than 1,500 hours TSN or TSO, determine the leakage rate on or before reaching 2,250 hours TSN or TSO.

(c) If the leakage rate in any servo actuator exceeds 700 cc per minute when performing the leakage rate inspection specified in paragraph (a) or (b) of this AD, then:

(1) Replace that servo actuator piston, HR Textron or Woodward HRT P/N 41004321 or P/N RW41004321, with a servo actuator piston, P/N 41012001 or P/N 41012001-001, and re-identify the servo actuator on the servo actuator data plate as Sikorsky P/N "76650-09805-111" and Woodward HRT P/N "3006760-111" using a metal stamp method; or

(2) Replace the servo actuator with an airworthy servo actuator, Sikorsky P/N 76650-09805-111, Woodward HRT P/N 3006760-111.

(d) On or before 3,000 hours TSN or TSO, whichever occurs first, replace each servo actuator piston and re-identify the servo actuator as specified in paragraph (c)(1) of this AD or replace each servo actuator as specified in paragraph (c)(2) of this AD.

(e) Modifying and re-identifying each servo actuator as specified in paragraph (c)(1) of this AD or replacing each servo actuator as specified in paragraph (c)(2) of this AD is terminating action for the requirements of this AD for the modified and re-identified or replaced servo actuator.

(f) 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, FAA, ATTN: Terry Fahr, Aviation Safety Engineer, 12 New England Executive Park, Burlington,

MA 01803, telephone (781) 238-7155, fax (781) 238-7170, for information about previously approved alternative methods of compliance.

(g) The Joint Aircraft System/Component (JASC) Code is 6730: Rotorcraft Servo System.

(h) This amendment becomes effective on June 17, 2010.

Issued in Fort Worth, Texas, on April 27, 2010.

Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-10-03 Sikorsky Aircraft Corporation: Amendment 39-16282. Docket No. FAA-2010-0060; Directorate Identifier 2010-SW-06-AD.

Applicability: Model S-92A helicopters, with main gearbox (MGB) filter bowl assembly, part number (P/N) 92351-15802-101, installed, certificated in any category.

Compliance: Required as indicated, unless done previously.

To prevent failure of the MGB filter bowl assembly due to failure of the mounting studs or the filter bowl, loss of oil from the MGB, failure of the MGB, and subsequent loss of control of the helicopter, do the following:

(a) Within 60 days:

(1) Remove the MGB filter bowl assembly by following the Accomplishment Instructions, paragraphs 3.A. (1) through 3.A.(5), of Sikorsky Alert Service Bulletin No. 92-63-022A, dated December 18, 2009 (ASB).

(2) Remove the primary filter element, P/N 70351-38801-102, from the MGB lube system filter and visually inspect it for damage as depicted in Figures 1, 2, and 3 of the ASB. If the primary filter element has "wavy" pleats, internal buckling, or indented dimples, before further flight, replace it with an airworthy filter element.

(3) Visually inspect the secondary filter element, P/N 70351-38801-103, for damage as depicted in Figures 4 and 5 of the ASB. If the secondary filter element has "wavy" pleats or an elongated cup, before further flight, replace it with an airworthy filter element.

(4) Replace the MGB lube system filter assembly mounting studs:

(i) Remove the studs by following the Accomplishment Instructions, paragraphs 3.B.(1) through 3.B.(4) of the ASB. Visually inspect the tapped holes for any damage to the threads. Serrations on the entire counter bore (360 degrees) are acceptable. Serrations in the housing must be intact, and mating serrations on the lock ring must line up with serrations on the housing. Visually inspect the housing to determine that the housing threads are free from damage and corrosion. Visually inspect housing lockring counterbore to determine if the housing is airworthy.

(ii) If you find damage or corrosion to the housing threads, the housing, or the lockring counterbore, stop work and contact Kirk Gustafson, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7190, fax (781) 238-7170.

(iii) If you do not find damage to the housing threads, the housing, or the lockring counterbore that requires repair, replace the mounting studs by following the Accomplishment Instructions, paragraphs 3.B.(7) through 3.B.(15) of the ASB.

(5) Install an airworthy, two-piece MGB filter bowl assembly modification kit, P/N 92070-35005-011, as depicted in Figures 8 and 9 of the ASB and by following the Accomplishment Instructions, paragraphs 3.C.(1) through 3.C.(20), of the ASB.

(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: Kirk Gustafson, Aviation Safety Engineer, Boston Aircraft Certification Office, Engine and Propeller Directorate, FAA, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7190, 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) Inspecting and replacing the MGB filter bowl assembly shall be done by following the specified portions of Sikorsky Alert Service Bulletin No. 92-63-022A, dated December 18, 2009. 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 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 June 21, 2010.

Issued in Fort Worth, Texas, on April 27, 2010.

Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-10-09 Turbomeca: Amendment 39-16288. Docket No. FAA-2005-21242; Directorate Identifier 2005-NE-09-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective June 21, 2010.

Affected ADs

- (b) This AD supersedes AD 2008-07-01, Amendment 39-15442.

Applicability

(c) This AD applies to Turbomeca Arriel 1B (that incorporate Turbomeca Modification (mod) TU 148), Arriel 1D, 1D1, and 1S1 engines that do not incorporate mod TU 347. Arriel 1B engines are installed on, but not limited to, Eurocopter AS-350B and AS-350BA "Ecureuil" helicopters. Arriel 1D engines are installed on, but not limited to, Eurocopter France AS-350B1 "Ecureuil" helicopters. Arriel 1D1 engines are installed on, but not limited to, Eurocopter France AS-350B2 "Ecureuil" helicopters. Arriel 1S1 engines are installed on, but not limited to, Sikorsky Aircraft Corporation S-76C helicopters.

Unsafe Condition

(d) This AD results from reports of new cases of failures of 2nd stage turbine blades since we issued AD 2008-07-01. We are issuing this AD to prevent the failure of 2nd stage turbine blades, which could result in an uncommanded in-flight engine shutdown, and a subsequent forced autorotation landing or accident.

Compliance

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

Initial Relative Position Check of 2nd Stage Turbine Blades

(f) Do an initial relative position check of the 2nd stage turbine blades using the Turbomeca Mandatory Service Bulletins (MSBs) specified in the following Table 1. Do the check before reaching any of the intervals specified in Table 1 or within 50 hours time-in-service after the effective date of this AD, whichever occurs later.

Table 1 - Initial and Repetitive Relative Position Check Intervals of 2nd Stage Turbine Blade

Turbomeca Engine Model	Initial Relative Position Check Interval	Repetitive Interval	Mandatory Service Bulletin
Arriel 1B (that incorporate mod TU 148), 1D1, and 1D.	Within 1,200 hours time-since-new (TSN) or time-since-overhaul (TSO) or 3,500 cycles-since-new (CSN) or cycles-since-overhaul (CSO), whichever occurs earlier.	Within 150 hours time-in-service-since-last-relative-position-check (TSLRPC).	A292 72 0807, Version E, dated October 29, 2009, paragraphs 2B(1)(a) and (b), or 2B(2)(a).
Arriel 1S1.	Within 1,200 hours TSN or TSO or 3,500 CSN or CSO, whichever occurs earlier.	Within 150 hours TSLRPC.	A292 72 0810, Version C, dated July 24, 2009, paragraphs 2B(1)(a) and (b), or 2B(2)(a), (b), and (c).

Repetitive Relative Position Check of 2nd Stage Turbine Blades

(g) Recheck the relative position of 2nd stage turbine blades at the TSLRPC intervals specified in Table 1 of this AD, using the Turbomeca MSBs indicated.

Credit for Previous Relative Position Checks

(h) Credit is allowed for previous relative position checks of 2nd stage turbine blades done using the following Turbomeca MSBs:

- (1) MSB No. A292 72 0263, Update Nos. 1 through 5.
- (2) MSB No. A292 72 0807, Original, and Update No. 1 through Version D.
- (3) MSB No. A292 72 0809, Update No. 1.
- (4) MSB No. A292 72 0810, Original, and Version A through Version B.

Initial Replacement of 2nd Stage Turbines on Arriel 1B Engines

(i) Initially replace the Arriel 1B 2nd stage turbine disk and blades with an inspected 2nd stage turbine that does not incorporate mod TU 347 and is fitted with new blades or with a 2nd stage turbine that incorporates mod TU 347, using Turbomeca MSB No. A292 72 0807, Version E, dated October 29, 2009, paragraphs 2B(1)(c) or (d), or 2B(2)(b) or (c), at the following times:

(1) Replace before further flight on engines with a 2nd stage turbine disk having accumulated more than 2,200 hours TIS since-new or since-last-inspection, whichever occurs later, or with 2nd stage turbine blades that have accumulated more than 3,000 hours TIS since-new.

(2) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, more than 1,800 hours TIS since-new, but 3,000 or fewer hours TIS since-new, replace before reaching any of the following:

- (i) 400 hours TIS from the effective date of this AD, or
- (ii) 3,000 hours TIS since-new on the 2nd stage turbine blades, or
- (iii) 2,200 hours TIS since-new or since-last-inspection, whichever occurs later, on the 2nd stage turbine disk.

(3) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, more than 900 hours TIS since-new, but 1,800 or fewer hours TIS since-new, replace before reaching any of the following:

- (i) 800 hours TIS from the effective date of this AD, or
- (ii) 2,200 hours TIS since-new or since-last-inspection, whichever occurs later, on the 2nd stage turbine disk.

(4) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, 900 or fewer hours TIS since-new, replace before the 2nd stage turbine blades have accumulated 1,200 hours TIS since-new.

Repetitive Replacements of 2nd Stage Turbines on Arriel 1B Engines

(j) Thereafter, for 2nd stage turbines that do not incorporate mod TU 347, replace the 2nd stage turbine disk and blades before the blades have accumulated 1,200 hours TIS since-new.

Initial Replacement of 2nd Stage Turbines on Arriel 1D and 1D1 Engines

(k) Initially replace the Arriel 1D and 1D1 2nd stage turbine disk and blades with an inspected turbine that does not incorporate mod TU 347 and is fitted with new blades or with a turbine that incorporates mod TU 347, using Turbomeca MSB No. A292 72 0807, Version E, dated October 29, 2009, paragraphs 2B(1)(c) or (d), or 2B(2)(b) or (c), at the following times:

(1) Replace before further flight on engines with a 2nd stage turbine disk having accumulated more than 1,500 hours TIS since-new or since-last-inspection, whichever occurs later, or with 2nd stage turbine blades having accumulated more than 1,500 hours TIS since-new.

(2) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, more than 900 hours TIS since-new, but 1,500 or fewer hours TIS since-new, replace before the 2nd stage turbine blades have accumulated 1,500 hours TIS since-new, or before the 2nd stage turbine disk has accumulated 1,500 hours TIS since-new, whichever occurs first.

(3) For engines with 2nd stage turbine blades having accumulated on the effective date of this AD, 900 or fewer hours TIS since-new, replace before the 2nd stage turbine blades have accumulated 1,200 hours TIS since-new.

Repetitive Replacements of 2nd Stage Turbines on Arriel 1D and 1D1 Engines

(l) Thereafter, for 2nd stage turbines that do not incorporate mod TU 347, replace the 2nd stage turbine disk and blades before the blades have accumulated 1,200 hours TIS since-new.

Relative Position Check Continuing Compliance Requirements

(m) All 2nd stage turbines, including those that are new or overhauled, must continue to comply with the actions specified in paragraphs (f) and (g) of this AD, unless mod TU 347 has been incorporated.

Optional Terminating Action

(n) Installing a new turbine, P/N 0 292 25 039 0, (incorporation of mod TU 347) terminates the requirements to perform the repetitive actions specified in paragraphs (g), (j), and (l) of this AD.

Alternative Methods of Compliance

(o) The Manager, Engine Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

Related Information

(p) The EASA airworthiness directive 2009-0236, dated October 29, 2009, also addresses the subject of this AD.

(q) Contact Kevin Dickert, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; e-mail: kevin.dickert@faa.gov; phone: (781) 238-7117, fax: (781) 238-7199, for more information about this AD.

Material Incorporated by Reference

(r) You must use the service information specified in the following Table 2 to perform the actions required by this AD. The Director of the Federal Register approved the incorporation by reference of the documents listed in the following Table 2 in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Contact Turbomeca, 40220 Tarnos, France; phone: (33) 05 59 74 40 00, fax: (33) 05 59 74 45 15, for a copy of this service information. 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>.

Table 2 – Incorporation by Reference

Turbomeca Mandatory Service Bulletin No.	Page	Version	Date
A 292 72 0807 Total Pages: 20	ALL	E	October 29, 2009
A 292 72 0810 Total Pages: 15	ALL	C	July 24, 2009

Issued in Burlington, Massachusetts, on April 28, 2010.
 Peter A. White,
 Assistant Manager, Engine and Propeller Directorate,
 Aircraft Certification Service.



2010-10-10 Hawker Beechcraft Corporation (Type Certificate No. A00010WI Previously Held by Raytheon Aircraft Company): Amendment 39-16289; Docket No. FAA-2010-0158; Directorate Identifier 2010-CE-006-AD.

Effective Date

- (a) This AD becomes effective on June 21, 2010.

Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Model 390 airplanes, serial numbers RB-4 through RB-248, that are certificated in any category.

Subject

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

Unsafe Condition

- (e) This AD results from a report that the metal oxide varistor (MOV) and spark gap wiring of the essential bus lightning strike protection were swapped. We are issuing this AD to detect and correct improper installation of the MOV and spark gap wiring, which could result in overload of the MOV in a lightning strike and allow electrical energy to continue to the essential bus and disable equipment that receives power from the essential bus. The disabled equipment could include the autopilot, anti-skid system, hydraulic indicator, spoiler system, pilot primary flight display, audio panel, or the 1 air data computer. This failure could lead to a significant increase in pilot workload during adverse operating conditions.

Compliance

- (f) To address this problem, you must do the following, unless already done:

Actions	Compliance	Procedures
(1) Inspect the essential bus lightning strike protection for proper installation of MOV and spark gap wiring.	Within the next 200 hours time-in-service after June 21, 2010 (the effective date of this AD) or within the next 12 months after June 21, 2010 (the effective date of this AD), whichever occurs first.	Follow Hawker Mandatory Service Bulletin SB 24-3995, issued September 2009.
(2) Where improper wiring installation is found, rework the essential bus lightning strike wiring installation for the MOV and spark gap.	Before further flight after the inspection in paragraph (f)(1) of this AD.	Follow Hawker Mandatory Service Bulletin SB 24-3995, issued September 2009.

Alternative Methods of Compliance (AMOCs)

(g) The Manager, Wichita 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. Send information to Attn: Kevin Schwemmer, Aerospace Engineer, FAA, Wichita Aircraft Certification Office (ACO), 1801 Airport Road, Room 100, Wichita, Kansas 67209; telephone: (316) 946-4174; fax: (316) 946-4107; e-mail: kevin.schwemmer@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.

Material Incorporated by Reference

(h) You must use Follow Hawker Mandatory Service Bulletin SB 24-3995, issued September 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 Hawker Beechcraft Corporation, 9709 East Central, Wichita, Kansas 67201; telephone: (316) 676-5034; fax: (316) 676-6614; Internet: https://www.hawkerbeechcraft.com/service_support/pubs/.

(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 April 30, 2010.
Steven W. Thompson,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



2010-10-14 Eurocopter France: Amendment 39-16293. Docket No. FAA-2010-0491; Directorate Identifier 2009-SW-64-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective June 7, 2010.

Other Affected ADs

- (b) None.

Applicability

- (c) This AD applies to Model AS332L2 helicopters, with a main rotor mast assembly (mast) that has not been modified per MOD 0743714, installed, certificated in any category.

Note 1: MOD 0743714 includes replacing the plastic peel shim with a stainless steel peel shim, installing improved swashplate bearing attachment screws, and increasing the torque on those screws.

Reason

- (d) The mandatory continued airworthiness information (MCAI) AD was issued after the discovery of broken swashplate bearing attaching screw heads. Failure of these screw heads could lead to the loss of the coupling between the non-rotating and the rotating swashplate. This AD is intended to prevent loss of power to the rotating swashplate and subsequent loss of control of the helicopter.

Actions and Compliance

- (e) For each mast that has less than 750 hours TIS since it was installed on any helicopter or since its last overhaul, within 20 hours time-in-service (TIS), unless already done, and thereafter at intervals not to exceed 25 hours TIS, and for each mast that has 750 or more hours TIS since it was installed on any helicopter or since its last overhaul, within 25 hours TIS, unless already done, and thereafter at intervals not to exceed 25 hours TIS:

- (1) Inspect for the presence of each mast swashplate bearing attachment screw head by either using a mirror or by feeling for the screw heads under the flange. Do the inspections by following the Accomplishment Instructions, Operational Procedure, paragraphs 2.B.1. through 2.B.2. and Figure 1, of Eurocopter Alert Service Bulletin (ASB) No. 62.00.66, dated September 13, 2006, except this AD does not require you to send the assembly to an "approved repair center for investigation and reconditioning."

(2) If an attachment screw head is missing, before further flight, replace the unairworthy mast with an airworthy mast.

Note 2: If you have complied with ASB No. 62.00.66, dated September 13, 2006, you have met the intent of this AD.

Differences Between the FAA AD and the MCAI AD

(f) This AD differs from the MCAI AD as follows:

(1) This AD does not require you to send the assembly to an "approved repair center for investigation and reconditioning."

(2) This AD uses "hours TIS" instead of "flying hours."

(3) This AD does not apply to non-installed parts.

(4) This AD does not include an inspection for masts that were inspected per a previous MCAI AD.

Other Information

(g) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, Rotorcraft Directorate, FAA, has the authority to approve AMOCs for this AD, if requested, using the procedures found in 14 CFR 39.19. Send AMOC request to DOT/FAA Southwest Region, Gary Roach, ASW-111, Aviation Safety Engineer, Rotorcraft Directorate, Regulations and Guidance Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5130, fax (817) 222-5961.

Related Information

(h) Mandatory Continuing Airworthiness Information (MCAI) Airworthiness Directive No. 2006-0339, dated November 9, 2006, contains related information.

Joint Aircraft System/Component (JASC) Code

(i) The JASC Code is 6230–Main Rotor Mast/Swashplate.

Material Incorporated by Reference

(j) You must use the specified portions of Eurocopter Alert Service Bulletin No. 62.00.66, dated September 13, 2006, to do the actions required.

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

(2) For service information identified in this AD, contact American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (972) 641-3460, fax (972) 641-3527.

(3) You may review copies of the service information 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/cfr/ibr-locations.html>.

Issued in Fort Worth, Texas, on May 4, 2010.
Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-10-15 Eurocopter France: Amendment 39-16294. Docket No. FAA-2010-0489; Directorate Identifier 2009-SW-78-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective on June 7, 2010.

Other Affected ADs

(b) None.

Applicability

(c) This AD applies to Model AS332L1 and AS332L2 helicopters, certificated in any category, with the customized "rails with the rear stop moved aft" rail assemblies, part number (P/N) 332P76-9012-02 or P/N 332P76-9012-03, installed, but without modification (MOD) 332V080210.00.

Reason

(d) The mandatory continuing airworthiness information (MCAI) AD states that with certain pilot and copilot seats in the rear high position and seat backrest fully tilted the seat shoulder harness could become jammed between the seat and bulkhead X1715 adversely affecting the strap tension and potentially disabling the proper function of the inertial reel. This condition, if not corrected could result in the shoulder harness no longer retaining the flight crew member in the seat in the event of an emergency or hard landing.

Actions and Compliance

(e) Within 15 hours time-in-service (TIS), modify the pilot and copilot seats by relocating the rail rear stops to the position depicted in Figure 2, "without the 'rail with the rear stop moved aft' customization" or "Post-Mod 332V080210.00." Do the modification by following the Operational Procedure, of the Accomplishment Instructions, paragraph 2.B.1., of Eurocopter Emergency Alert Service Bulletin (EASB) No. 25.02.20, dated October 19, 2009. After modifying the position of the rear stop, identify the modification (MOD) using indelible ink and marking "MOD332V080210.00" on the left rail at the rear stop.

Note: The one Eurocopter EASB contains two different service bulletin numbers (Nos. 25.02.20 and 25.01.35) applicable to two different Eurocopter model helicopters. EASB No. 25.02.20 relates to Eurocopter Model AS332L1 and L2 helicopters. EASB No. 25.01.35 relates to Eurocopter Model AS532U2 military helicopters that are not type certificated in the United States.

(f) After the effective date of this AD, do not install a pilot or copilot left seat rail, P/N 332P76-9012-02 or P/N 332P76-9012-03, on a helicopter unless it has been modified and reidentified by following paragraph (e) of this AD.

Differences Between This AD and the MCAI AD

(g) We refer to flight hours as hours TIS.

Other Information

(h) Alternative Methods of Compliance (AMOCs): The Manager, Safety Management Group, ATTN: DOT/FAA Southwest Region, Gary Roach, ASW-111, Aviation Safety Engineer, Rotorcraft Directorate, Regulations and Guidance Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5130, fax (817) 222-5961, has the authority to approve AMOCs for this AD, if requested, using the procedures found in 14 CFR 39.19.

Related Information

(i) The European Aviation Safety Agency MCAI AD No. 2009-0227-E, dated October 22, 2009, contains related information.

Joint Aircraft System/Component (JASC) Code

(j) The JASC Code is 5347: Seat/Cargo Attach Fittings.

Material Incorporated by Reference

(k) You must use the specified portions of Eurocopter Emergency Alert Service Bulletin No. 25.02.20, dated October 19, 2009, to do the actions required.

(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 American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, TX 75053-4005, telephone (800) 232-0323, fax (972) 641-3710, or at <http://www.eurocopter.com>.

(3) You may review copies at the FAA, Office of the Regional Counsel, Southwest Region, 2601 Meacham Blvd, Fort Worth, TX 76137; 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 Fort Worth, Texas, on April 29, 2010.

Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



DATE: May 11, 2010

AD #: 2010-11-51

This Emergency Airworthiness Directive (EAD) is prompted by several reports of cracking in a tail gearbox (TGB) control lever, part number (P/N) 350A33-1058-03, including an accident involving an AS350B2 helicopter. An investigation revealed that a few surface anomalies may lead to a crack in the TGB control lever. This condition, if not detected could result in failure of the TGB control lever, loss of tail rotor control, and subsequent loss of control of the helicopter.

We have reviewed Eurocopter Emergency Alert Service Bulletin (EASB) No. 05.00.62, for Model AS350 helicopters and EASB No. 05.00.57 for Model AS355 helicopters. Both EASBs are Revision 1, dated April 23, 2010, and both describe procedures for a visual inspection of the TGB control lever for a crack that must be performed after the last flight of each day and prior to exceeding 10 flying hours for each inspection. The EASBs also describe a rework procedure for affected TGB control levers which must be accomplished within 660 flying hours or no later than June 30, 2011, or before installing an affected TGB control lever on a helicopter. The one Eurocopter EASB contains four different service bulletin numbers (Nos. 05.00.62, 05.00.57, 05.00.38, and 05.00.35) applicable to four different Eurocopter model helicopters. EASB No. 05.00.38 relates to Eurocopter Model AS550 helicopters, and EASB No. 05.00.35 relates to Eurocopter Model AS555 helicopters. Eurocopter Model AS550 and AS555 helicopters are military models and are not type-certificated in the United States. This AD does not incorporate EASB No. 05.00.38 nor EASB No. 05.00.35.

The European Aviation Safety Agency (EASA), which is the Technical Agent for France, notified the FAA that an unsafe condition may exist on these helicopter models. EASA advises of a crack discovered in a TGB control lever, which could lead to a loss of tail rotor control and subsequent loss of control of the helicopter. EASA classified the service bulletin as mandatory and issued EASA Emergency AD No. 2010-0082-E, dated April 27, 2010, to ensure the continued airworthiness of these helicopters. This AD differs from EASA Emergency AD No. 2010-0082-E as follows:

- We include the Eurocopter Model AS350C and AS350D1 helicopters that may contain the affected TGB control lever;
- We use the term “hours time-in-service” rather than “flight hours”;
- We do not require replacing the TGB control lever within 660 hours TIS or 14 months, but instead offer optional terminating actions for the repetitive inspection requirements; and
- We do not require you to contact Eurocopter if a crack is found during any inspection.

These helicopter models are type certificated for operation in the United States under the provisions of 14 CFR 21.29 and the applicable bilateral agreement. Pursuant to the applicable bilateral agreement, EASA has kept the FAA informed of the situation described. The FAA has examined the findings of EASA, reviewed all available information, and determined that AD action is necessary for products of these type designs that are certificated for operation in the United States.

This unsafe condition is likely to exist or develop on other helicopters of these same type designs. Therefore, this AD requires, within 10 hours time-in-service (TIS), and thereafter at intervals not to exceed 10 hours TIS, a visual inspection for cracking in the TGB control lever in accordance with the EASB. If a crack is found, replacing the cracked TGB control lever with an airworthy TGB control lever is required before further flight. Optional terminating action for the inspection requirements of this AD can be accomplished by either:

- Replacing a TGB control lever with an airworthy TGB control lever that is marked with an “X” near the P/N; or
- Stripping the rework area “B” as shown in Figure 4 of each EASB and performing a dye-penetrant inspection on that area for a crack. If no crack is found, reworking and marking the TGB control lever before further flight is required. If a crack is found, before further flight, removing and replacing the cracked TGB control lever with an airworthy TGB control lever is required.

These actions are required to be accomplished in accordance with specified portions of the EASBs described previously.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

2010-11-51 EUROCOPTER FRANCE: Directorate Identifier No. 2010-SW-053-AD.

Applicability: Model AS350B, BA, B1, B2, C, D, and D1 helicopters and Model AS355E, F, F1, F2, and N helicopters, with a tail gearbox (TGB) control lever, part number (P/N) 350A33-1058-00, P/N 350A33-1058-01, P/N 350A33-1058-02, or P/N 350A33-1058-03, that is not marked with an “X” near the P/N, installed, certificated in any category.

Compliance: Required as indicated.

To detect cracking in a TGB control lever and prevent failure of the TGB control lever, loss of tail rotor control, and subsequent loss of control of the helicopter, accomplish the following:

- (a) Within 10 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 10 hours TIS, visually inspect the affected TGB control lever for cracking in accordance with the Accomplishment Instructions, paragraph 2.B.1.a., in Eurocopter Emergency Alert Service Bulletin (EASB) No. 05.00.62, Revision 1, dated April 23, 2010, for Model AS350 helicopters or EASB No. 05.00.57, Revision 1, dated April 23, 2010, for Model AS355 helicopters.
- (b) If a crack is found, before further flight, remove and replace the cracked TGB control lever with an airworthy TGB control lever in accordance with the Accomplishment Instructions, paragraph 2.B.2., in the EASB appropriate for your model helicopter.
- (c) Either of the following options constitutes a terminating action for the inspection requirements of this AD:
 - (1) Replace a TGB control lever with an airworthy TGB control lever that is marked with an “X” near the P/N; or

(2) Strip the rework area “B” as shown in Figure 4 of each EASB and perform a dye-penetrant inspection on that area for a crack. If no crack is found, rework and mark the TGB control lever in accordance with paragraph 2.B.3.b. of the EASB appropriate for your model helicopter, except you are not required to contact Eurocopter France. If a crack is found, before further flight, remove and replace the cracked TGB control lever with an airworthy TGB control lever in accordance with the Accomplishment Instructions, paragraph 2.B.2., in the EASB.

Note 1: One Eurocopter EASB contains four different service bulletin numbers but only portions of 2 EASBs are being incorporated.

Note 2: Installing a reinforced TGB control lever, P/N 350A33-1524-00 or P/N 350A33-1526-00, that does not need to be marked with an “X” constitutes compliance with paragraph (c) of this AD.

(d) 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, Safety Management Group, FAA, ATTN: J.R. Holton, Jr., Aviation Safety Engineer, ASW-112, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-4964, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(e) Special flight permits may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the helicopter to a location where the inspection requirements of paragraph (a) of this AD can be accomplished.

(f) The Joint Aircraft System/Component (JASC) Code is 6720: Tail Rotor Control System.

(g) Copies of the applicable service information may be obtained from American Eurocopter Corporation, 2701 Forum Drive, Grand Prairie, Texas 75053-4005, telephone (800) 232-0323, fax (972) 641-3710, or at <http://www.eurocopter.com>.

(h) Emergency AD 2010-11-51, issued May 11, 2010, becomes effective upon receipt.

Note 3: The subject of this AD is addressed in European Aviation Safety Agency (France) Emergency AD No. 2010-0082-E, dated April 27, 2010.

FOR FURTHER INFORMATION CONTACT: J.R. Holton, Jr., Aviation Safety Engineer, FAA, Rotorcraft Directorate, Safety Management Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-4964, fax (817) 222-5961.

Issued in Fort Worth, Texas, on May 11, 2010.

Judy I. Carl,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



FAA
Aviation Safety

EMERGENCY **AIRWORTHINESS DIRECTIVE**

www.faa.gov/aircraft/safety/alerts/

DATE: May 19, 2010

AD #: 2010-11-52

This Emergency Airworthiness Directive (AD) is prompted by reports of intermittent malfunctions of the LITEF Attitude Heading and Reference System (AHRS) units of the navigation system. This condition, if not corrected, could result in malfunction of the autopilots, inability to reset the autopilots, an uncommanded roll, reduction in rotorcraft functional capabilities, inability of the crew to perform the required tasks, and subsequent loss of control of the helicopter.

We have reviewed Sikorsky Alert Service Bulletin No. 76-34-11, dated May 17, 2010 (ASB). The ASB specifies informing operators of an interim minimum flight crew restriction of two pilots for Instrument Flight Rules (IFR) and night flight for helicopters equipped with LITEF LCR-100, Mod Status 18, AHRS units. The ASB also specifies removing and inspecting the AHRS units to determine if part number (P/N) 145130-7100, Mod Status 18, is installed. Also, the ASB specifies if an AHRS unit with LITEF LCR-100, P/N 145130-7100, Mod Status 18 is installed, identifying the unit with a placard with a different P/N. Finally, the ASB specifies installing 2 placards P/N SS9140-1746 or locally fabricated placards onto the instrument panel.

This unsafe condition is likely to exist or develop on other helicopters of these same type designs. Therefore, this AD requires inspecting the AHRS unit to determine if it is a Mod Status 18. If the nameplate on an AHRS unit is P/N 145130-7100, Mod Status 18, this AD requires installing placards on the instrument panel to prohibit single pilot IFR and single pilot night flight, and reducing airspeeds to 120 KIAS if both autopilots uncouple during IFR or night flight. This AD also requires inserting Active Temporary Revisions into the Limitations section of the applicable Rotorcraft Flight Manual (RFM) to limit the minimum flight crew to two pilots for IFR and night flight and to reduce airspeed to 120 KIAS if both autopilots uncouple during IFR or night flight. This AD does not require installing placards on the AHRS unit as specified in the ASB. The actions must be done by following specified portions of the ASB described previously.

This rule is issued under 49 U.S.C. Section 44701 pursuant to the authority delegated to me by the Administrator, and is effective immediately upon receipt of this emergency AD.

2010-11-52 SIKORSKY AIRCRAFT CORPORATION: Directorate Identifier
2010-SW-059-AD.

Applicability: Model S-76A, B, and C helicopters, with LITEF LCR-100, part number (P/N) 145130-7100, Attitude Heading and Reference System (AHRS) Unit, installed, certificated in any category.

Compliance: Within 5 days, unless accomplished previously, and any time thereafter when a LITEF LCR-100, part number (P/N) 145130-7100, Attitude Heading and Reference System (AHRS) Unit is installed.

To prevent malfunction of the autopilot, inability to reset the autopilots, an uncommanded roll, reduction in rotorcraft functional capabilities, inability of the crew to perform the required tasks, and subsequent loss of control of the helicopter, do the following:

(a) Inspect the nameplate for the No. 1 and No. 2 AHRS units to determine if P/N 145130-7100, Mod Status 18, is installed.

(1) If P/N 145130-7100, Mod Status 18, is not installed, no further action is required.

(2) If P/N 145130-7100, Mod Status 18, is installed on either unit, accomplish the following:

(i) Install instrument panel placards as shown in Figure 2 in the areas depicted in Figure 3 of Sikorsky Alert Service Bulletin No. 76-34-11, dated May 17, 2010 (ASB), and by following the Accomplishment Instructions, paragraph 3.A.(6)(c) through (d) of the ASB.

(ii) Insert an Active Temporary Revision into the Limitations section of the Rotorcraft Flight Manual (RFM) to limit the minimum flight crew to two pilots for Instrument Flight Rules and night flight for the affected helicopters as follows:

Table 1

Model	RFM Document No.	Active Temporary Rev. No.
S-76A	SA-4047-76-1	T-Revision 3
S-76B	SA 4047-76B-1	T-Revision 3
S-76C (TurboMeca Arriel 1S1 engines installed)	SA 4047-76C-1	T-Revision 3
S-76C (TurboMeca Arriel 2S1 engines installed)	SA 4047-76C-10	T-Revision 4
S-76C (TurboMeca Arriel 2S1 engines installed and s/n 760511 and subsequent)	SA 4047-76C-14	T-Revision 4
S-76C (TurboMeca Arriel 2S2 engines installed)	SA 4047-76C-15	T-Revision 1

(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, FAA, ATTN: Tony Pigott, Aviation Safety Engineer, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7158, fax (781) 238-7170, for information about previously approved alternative methods of compliance.

(c) The Joint Aircraft System/Component (JASC) Code is 3420: Navigation.

(d) Copies of the applicable service information 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>.

(e) Emergency AD 2010-11-52, issued May 19, 2010, becomes effective upon receipt.

FOR FURTHER INFORMATION CONTACT: Tony Pigott, Aviation Safety Engineer, Boston Aircraft Certification Office, 12 New England Executive Park, Burlington, MA 01803, telephone (781) 238-7158, fax (781) 238-7170.

Issued in Fort Worth, Texas, on May 19, 2010.

Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.