



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

BIWEEKLY 2010-03

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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
2009-03-02		Lifesaving Systems Corp.	Appliance



2009-19-51 Agusta S.p.A.: Amendment 39-16129; Docket No. FAA-2009-1125; Directorate Identifier 2009-SW-50-AD.

Applicability

This AD applies to Model AB139 and AW139 helicopters, certificated in any category.

Compliance

Required as indicated.

To prevent failure of a tailboom and subsequent loss of control of the helicopter, do the following:

(a) Using the large end of the head of an aluminum hammer, part number 109-3101-58-2 (GF-06-00), tap inspect the full skin surface of the tailboom between Stations 8700 and 11019.5 for a hollow or dull sound, which will indicate a bond separation or debond area. Do the inspections at the following intervals:

(1) For helicopters, serial number (S/N) 31006, 31020, 31022, 31042, 31136, 31157, and 31248, within 5-hours time-in-service (TIS), unless done previously, and thereafter at intervals not to exceed 50-hours TIS.

Note 1: Agusta Alert Bollettino Tecnico Nos. 139-193, and 139-194, both dated September 3, 2009 (ABTs), contain guidance on accomplishing the required actions of this AD. Following the Compliance Instructions in the ABTs accomplishes the requirements of this AD.

(2) For all helicopters, except S/N 31006, 31020, 31022, 31042, 31136, 31157, and 31248, within 25-hours TIS or 30 days, whichever occurs first, unless done previously, and thereafter at intervals not to exceed 50-hours TIS.

(b) If you find any bond separation, use the small end of the head of the hammer to identify the edges of the debonded area. If the debonded area goes beyond the strake, remove the strake. Using a marking pen or chalk, mark the edge of the debonded area.

(1) Measure the surface area of each debonded area, the distance between the edges of the debonded areas, and the distance of the edge of each debonded area from the edge of the bond joint.

(2) Before further flight, repair the tailboom using FAA-approved data and procedures if:

(i) The debonded area exceeds 320 mm² (0.5 in²),

(ii) The distance between the edges of any two debonded areas is less than or equal to three times the largest debond dimension of the two debonded areas measured on a line between the centers of the two debonded areas, or

(iii) The edge of any debonded area is less than 3 mm (0.118 in) from the edge of the panel bond joint.

(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, Safety Management Group, ATTN: DOT/FAA Southwest Region, Sharon Miles, ASW-111, Aviation Safety Engineer, Rotorcraft Directorate, Regulations and Guidance Group, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5122, fax (817) 222-5961, for information about previously approved alternative methods of compliance.

(d) Special flight permits will not be issued.

(e) Copies of the applicable service information may be obtained from Agusta, Via Giovanni Agusta, 520 21017 Cascina Costa di Samarate (VA), Italy, telephone 39 0331-229111, fax 39 0331-229605/222595, or at http://customersupport.agusta.com/technical_advice.php.

(f) The JASC Code for this part is Code 5302: Rotorcraft Tailboom.

Note 2: The subject of this AD is addressed in European Aviation Safety Agency AD No. 2009-0198-E, dated September 4, 2009.

(g) This amendment becomes effective on February 8, 2010, to all persons except those persons to whom it was made immediately effective by Emergency AD 2009-19-51, issued September 16, 2009, which contained the requirements of this amendment.

Issued in Fort Worth, Texas, on January 11, 2010.
Mark R. Schilling,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2009-26-11 Thrush Aircraft, Inc. (Type Certificate Previously Held by Quality Aerospace, Inc. and Ayres Corporation): Amendment 39-16150; Docket No. FAA-2007-27862; Directorate Identifier 2007-CE-036-AD.

Effective Date

- (a) This AD becomes effective on February 24, 2010.

Affected ADs

- (b) The following lists a history of the ADs affected by this AD action:
 - (1) This AD supersedes AD 2006-07-15, Amendment 39-14542;
 - (2) AD 2006-07-15 superseded AD 2003-07-01, Amendment 39-13097;
 - (3) AD 2003-07-01 superseded AD 2000-11-16, Amendment 39-11764;
 - (4) AD 2000-11-16 superseded AD 97-17-03, Amendment 39-10195; and
 - (5) AD 97-17-03 superseded AD 97-13-11, Amendment 39-10071.

Applicability

(c) This AD affects the following airplane models and serial numbers (S/Ns) in Table 1 that are certificated in any category when wing front lower spar cap part numbers (P/Ns) 20207-1, 20207-2, 20207-11, 20207-12, 20207-13, 20207-14, 20207-15, or 20207-16 are installed. This AD applies to the S/Ns in Table 1 with or without a "DC" suffix. This AD does not affect airplanes with any other wing front lower spar cap part number, e.g. Thrush P/N 22507 (any dash number) or Supplemental Type Certificate (STC) SA03654AT parts. The table also identifies the group that each airplane belongs in when determining inspection compliance times and life limit times for the parts:

Table 1–Applicability and Airplane Groups

Model	S/Ns	Group
(1) S-2R	5000R through 5100R, except 5010R, 5031R, 5038R, 5047R, and 5085R	1
(2) S2R-G1	G1-101 through G1-106	1
(3) S2R-R1820	R1820-001 through R1820-035	1
(4) S2R-T15	T15-001 through T15-033 (also see paragraph (d) of this AD)	1
(5) S2R-T34	6000R through 6049R, T34-001 through T34-143, T34-145, T34-171, T34-180, and T34-181 (also see paragraph (e) of this AD)	1
(6) S2R-G10	G10-101 through G10-138, G10-140, and G10-141	2
(7) S2R-G5	G5-101 through G5-105	2
(8) S2R-G6	G6-101 through G6-147	2
(9) S2RHG-T65	T65-002 through T65-018	2
(10) S2R-R1820	R1820-036	2
(11) S2R-T34	T34-144, T34-146 through T34-170, T34-172 through T34-179, and T34-189 through T34-234 (also see paragraph (e) of this AD)	2
(12) S2R-T45	T45-001 through T45-014	2
(13) S2R-T65	T65-001 through T65-018	2
(14) 600 S2D	All serial numbers beginning with 600-1311D	3
(15) S-2R	1380R, 1416R through 2592R, 3000R, and 3002R	3
(16) S2R-R1340	R1340-001 through R1340-035	3
(17) S2R-R3S	R3S-001 through R3S-011	3
(18) S2R-T11	T11-001 through T11-005	3
(19) S2R-G1	G1-107 through G1-115	5
(20) S2R-G10	G10-139, G10-142 through G10-165	5
(21) S2R-G6	G6-148 through G6-155	5
(22) S2RHG-T34	T34HG-102	5
(23) S2R-T15	T15-034 through T15-040 (also see paragraph (d) of this AD)	5
(24) S2R-T34	T34-236 through T34-270 (also see paragraph (e) of this AD)	5
(25) S2R-T45	T45-015	5
(26) S-2R	5010R, 5031R, 5038R, 5047R, and 5085R	6

(d) The S/Ns of Model S2R-T15 airplanes could incorporate T15-xxx and T27-xxx (xxx is the variable for any of the S/Ns beginning with T15- and T27-). This AD applies to both of these S/N designations as they are both Model S2R-T15 airplanes.

(e) The S/Ns of Model S2R-T34 airplanes could incorporate T34-xxx, T36-xxx, T41-xxx, or T42-xxx (xxx is the variable for any of the S/Ns beginning with T34-, T36-, T41-, and T42-). This AD applies to all of these S/N designations as they are all Model S2R-T34 airplanes.

(f) Any Group 3 airplane that has been modified with a hopper of a capacity more than 410 gallons, a piston engine greater than 600 horsepower, or a gas turbine engine greater than 600 horsepower, is a Group 1 airplane for the purposes of this AD. Inspect the airplane at the Group 1 compliance time specified in this AD. Replace the wing front lower spar caps in accordance with the formulas given in paragraph (k) of this AD.

(g) Group 6 airplanes were originally manufactured with higher horsepower radial engines, but were converted to lower horsepower radial engines. They are now configured identically to Group 3 airplanes.

Unsafe Condition

(h) This AD is the result of the analysis of data from 117 wing front lower spar cap fatigue cracks found on similar design Model 600 S2D and S2R (S-2R) series airplanes and the FAA's determination that the replacement of high time wing front lower spar caps is necessary to address the unsafe condition for certain airplanes. Since we issued AD 2006-07-15, analysis reveals that inspections are not detecting all existing cracks, and incidences of undetected cracks are increasing. This AD retains the actions of AD 2006-07-15 and imposes a life limit on the wing front lower spar caps that requires you to replace the wing front lower spar caps when the life limit is reached. This AD also changes the requirements and applicability of the groups discussed above and removes the ultrasonic inspection method. We are issuing this AD to prevent wing front lower spar cap failure caused by undetected fatigue cracks. Such failure could result in loss of a wing.

Compliance

(i) To address the problem, do the following, unless already done:

(1) If you have already done an inspection required by AD 2006-07-15, within the next 30 days after February 24, 2010 (the effective date of this AD), identify the number of hours time-in-service (TIS) since your last inspection required by AD 2006-07-15. You will need this to establish the inspection interval for the next inspection required by this AD.

(2) Inspect the two outboard bolt hole areas (whether 1/4-inch and 5/16-inch diameter bolt holes or both 5/16-inch diameter bolt holes) on each wing front lower spar cap for fatigue cracking using magnetic particle or eddy current procedures. If Kaplan splice blocks, P/N 22515-1/-3 or P/N 88-251, are installed following Quality Aerospace, Inc. Custom Kit No. CK-AG-30, dated December 6, 2001, inspect the three outboard bolt hole areas on each wing front lower spar cap for fatigue cracking using magnetic particle or eddy current procedures. Use the compliance times listed in paragraph (i)(3) of this AD for the initial inspection and the compliance time listed in paragraphs (i)(5), (i)(6), or (i)(7) of this AD for the repetitive inspections. The cracks may emanate from the bolt

hole on the face of the wing front lower spar cap or they may occur in the shaft of the hole. Inspect both of those areas.

(i) If using the magnetic particle method, inspect using the "Inspection" portion of the "Accomplishment Instructions" and "Lower Splice Fitting Removal and Installation Instructions" in Ayres Corporation Service Bulletin No. SB-AG-39, dated September 17, 1996. Do the inspection following FAA Advisory Circular (AC) 43.13-1B, Chapter 5, Section 4, Magnetic Particle Inspection, using the wet particle method. You may obtain a copy of AC 43.13-1B at http://www.faa.gov/regulations_policies/. Caution: Firmly support the wings during the inspection to prevent movement of the wing front lower spar caps when the splice blocks are removed. This will allow easier realignment of the splice block holes and the holes in the wing front lower spar cap for bolt insertion and prevent damage to the bolt hole. Damage to the bolt hole inner surface or edge of the bolt hole can cause cracks to begin prematurely.

(ii) The inspection must be done by or supervised by a Level 2 or Level 3 inspector certified following the guidelines in FAA AC 65-31A. You may obtain a copy of AC 65-31A at http://www.faa.gov/regulations_policies/.

(iii) If using eddy current methods, a procedure must be sent to the FAA, Atlanta Aircraft Certification Office (ACO), for approval before doing the inspection. Send your proposed procedure to the FAA, Atlanta ACO, Attn: Cindy Lorenzen, 1701 Columbia Avenue, College Park, Georgia 30337. You are not required to remove the splice block for the eddy current inspections, unless corrosion is visible. Eddy current inspection procedures previously approved under AD 2006-07-15, AD 2003-07-01, AD 2000-11-16, AD 97-13-11, and/or AD 97-17-03 remain valid for this AD.

(iv) If you change the inspection method used (magnetic particle or eddy current), the TIS intervals for repetitive inspections are based on the method used for the last inspection.

(3) If airplanes have not yet reached the threshold for the initial inspection required in AD 2006-07-15, initially inspect following the wing front lower spar cap hours total TIS schedule below or within the next 50 hours TIS after February 24, 2010 (the effective date of this AD), whichever occurs later:

Table 2–Initial Inspection Times

Airplane Group	Initially inspect upon accumulating the following hours total TIS on the wing front lower spar cap
(i) Group 1	2,000 hours TIS
(ii) Group 2	1,400 hours TIS
(iii) Group 3	6,400 hours TIS
(iv) Group 5	1,000 hours TIS
(v) Group 6	(A) S/N 5010R: 5,530 hours TIS (B) S/N 5038R: 5,900 hours TIS (C) S/N 5031R: 6,400 hours TIS (D) S/N 5047R: 6,400 hours TIS (E) S/N 5085R: 6,290 hours TIS
(vi) Any airplane with the entire Custom Kit CK-AG-41 installed	2,000 hours TIS

(4) Airplanes in all groups must meet the following conditions before doing the repetitive inspections required in paragraphs (i)(5), (i)(6), or (i)(7) of this AD:

- (i) No cracks have been found previously on wing front lower spar cap; or
- (ii) Small cracks have been repaired through cold work (or done as an option if never cracked) following Ayres Corporation Service Bulletin No. SB-AG-39, dated September 17, 1996; or
- (iii) Small cracks have been repaired by reaming the 1/4-inch bolt hole to 5/16 inches diameter (or done as an option if never cracked) following Ayres Corporation Custom Kit No. CK-AG-29, Part I, dated December 23, 1997; or
- (iv) Small cracks have been repaired through previous alternative methods of compliance (AMOC); or
- (v) Small cracks have been repaired by installing Kaplan splice blocks, P/N 22515-1/-3 or P/N 88-251 (or done as an option if never cracked) following Quality Aerospace, Inc. Custom Kit No. CK-AG-30, dated December 6, 2001.

(5) Repetitively inspect Groups 1, 2, 3, and 6 airplanes that do not have "big butterfly" plates and lower splice plates, P/Ns 20211-09 and 20211-11, installed following Ayres Corporation Custom Kit No. CK-AG-29, Part II, dated December 23, 1997; or that do not have "big butterfly" plates and lower splice plates, P/Ns 94418-5 and 94418-7 or P/Ns 94418-13 and 94418-15, installed following Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007; and meet the conditions in paragraph (i)(4) of this AD. Follow the wing front lower spar cap hours TIS compliance schedule below:

Table 3—Repetitive Inspection Times for Airplane Groups 1, 2, 3, and 6 Without "Big Butterfly" Plates and Lower Splice Plates

When airplanes accumulate the following hours TIS on the wing front lower spar cap since the last inspection required in AD 2006-07-15,	Inspect within the following hours TIS after the effective date of this AD,	Inspect thereafter at intervals not to exceed...
(i) <u>Magnetic Particle inspection:</u>		
(A) 350 or more hours TIS	(A) 50 hours TIS	250 hours TIS
(B) 175 through 349 hours TIS	(B) 75 hours TIS	
(C) Less than 175 hours TIS	(C) upon accumulating 250 hours TIS	
(ii) <u>Eddy Current inspection:</u>		
(A) 500 or more hours TIS	(A) 50 hours TIS	350 hours TIS
(B) 275 through 499 hours TIS	(B) 75 hours TIS	
(C) Less than 275 hours TIS	(C) upon accumulating 350 hours TIS	

(6) Repetitively inspect Groups 1, 2, 3, 5, and 6 airplanes that have "big butterfly" plates and lower splice plates, P/Ns 20211-09 and 20211-11, installed following Ayres Corporation Custom Kit No. CK-AG-29, Part II, dated December 23, 1997; or that have "big butterfly" plates and lower splice plates, P/Ns 94418-5 and 94418-7, or P/Ns 94418-13 and 94418-15, installed following Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007; and meet the conditions in paragraph (i)(4) of this AD. Follow the wing front lower spar cap hours TIS compliance schedule below:

Table 4—Repetitive Inspections Times for Airplane Groups 1, 2, 3, 5, and 6 With "Big Butterfly" Plates and Lower Splice Plates

When airplanes accumulate the following hours TIS on the wing front lower spar cap since the last inspection required in AD 2006-07-15,	Inspect within the following hours TIS after the effective date of this AD,	Inspect thereafter at intervals not to exceed...
(i) <u>Magnetic particle inspection:</u>		450 hours TIS
(A) 650 or more hours TIS	(A) 50 hours TIS	
(B) 375 through 649 hours TIS	(B) 75 hours TIS	
(C) Less than 375 hours TIS	(C) upon accumulating 450 hours TIS	
(ii) <u>Eddy Current inspection:</u>		625 hours TIS
(A) 900 or more hours TIS	(A) 50 hours TIS	
(B) 550 through 899 hours TIS	(B) 75 hours TIS	
(C) Less than 550 hours TIS	(C) upon accumulating 625 hours TIS	

Note 1: Group 5 airplanes had P/Ns 20211-09 and 20211-11 installed at the factory.

(7) Repetitively inspect airplanes that incorporate Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007, in its entirety that meet the conditions in paragraph (i)(4) of this AD. Follow the wing front lower spar cap hours TIS compliance schedule below:

Table 5—Repetitive Inspection Times for Airplanes With Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, Incorporated in Its Entirety

When using the following inspection methods,	Repetitively inspect at intervals not to exceed ...
(i) Magnetic particle inspection	900 hours TIS
(ii) Eddy current inspection	1,250 hours TIS

(j) Initially replace the wing front lower spar caps, P/Ns 20207-1, 20207-2, 20207-11, 20207-12, 20207-13, 20207-14, 20207-15, or 20207-16, at the times specified in Table 6 of this AD. Repetitively replace thereafter at the life limit times specified in Table 7 of this AD. Do the replacements as specified in paragraph (l)(4) of this AD.

Table 6—Initial Compliance Time for Wing Front Lower Spar Cap Replacement

Total Hours TIS on the wing front lower spar cap	Replace the wing front lower spar cap upon accumulating the following hours TIS on the spar cap after the effective date of this AD.
(i) Group 1 with a radial engine and more than 15,000 hours TIS	500 hours
(ii) Group 1 with a radial engine and 12,000 to 15,000 hours TIS	1,000 hours
(iii) Group 1 with a radial engine and 9,000 to 11,999 hours TIS	1,500 hours
(iv) Group 1 with a radial engine and 7,400 to 8,999 hours TIS	2,000 hours
(v) Group 1 with a radial engine and less than 7,400 hours TIS	Use Table 7(xxii)
(vi) Group 1 with a turbine engine and more than 14,000 hours TIS	500 hours
(vii) Group 1 with a turbine engine and 11,000 to 14,000 hours TIS	1,000 hours
(viii) Group 1 with a turbine engine and 8,000 to 10,999 hours TIS	1,500 hours
(ix) Group 1 with a turbine engine and 4,200 to 7,999 hours TIS	2,000 hours
(x) Group 1 with a turbine engine and less than 4,200 hours TIS	Use Table 7(xxiii)
(xi) Group 2 with more than 9,000 hours TIS	500 hours
(xii) Group 2 with 6,000 to 9,000 hours TIS	1,000 hours
(xiii) Group 2 with 3,900 hours to 5,999 hours TIS	1,500 hours
(xiv) Group 2 with less than 3,900 hours TIS	Use Table 7(xxiv)
(xv) Group 3 and 6 with more than 28,800 hours TIS	500 hours
(xvi) Group 3 and 6 with 27,800 to 28,799 hours TIS	1,000 hours
(xvii) Group 3 and 6 with less than 27,800 hours TIS	Use Table 7(xxv)
(xviii) Group 5 with more than 8,000 hours TIS	500 hours
(xix) Group 5 with 5,000 to 7,999 hours TIS	1,000 hours
(xx) Group 5 with 2,400 to 4,999 hours TIS	1,500 hours
(xxi) Group 5 with less than 2,400 hours TIS	Use Table 7(xxvi)

Table 7–Wing Front Lower Spar Cap Life Limits

Airplane Group	Replace wing front lower spar cap upon the accumulation of the following hours TIS on the spar cap:
(xxii) Group 1 with a radial engine	9,400 hours TIS
(xxiii) Group 1 with a turbine engine	6,200 hours TIS
(xxiv) Group 2	5,400 hours TIS
(xxv) Groups 3 and 6	28,800 hours TIS
(xxvi) Group 5	3,900 hours TIS with original wing front lower spar cap P/N 20207-11 or P/N 20207-12 5,400 hours TIS after original wing front lower spar cap has been replaced with any P/N 20207-xx wing front lower spar cap

Note 2: There is evidence of sharp, uneven edges on the spar cap bolt holes that resulted from the manufacturing process in Group 5 airplanes. Once the original wing front lower spar caps are replaced, the life limit increases.

(k) As previously stated in paragraph (f) of this AD, any Group 3 airplane that has been modified with a hopper of a capacity more than 410 gallons, a piston engine greater than 600 horsepower, or a gas turbine engine greater than 600 horsepower, is a Group 1 airplane for the purposes of this AD. Replace the wing front lower spar caps using the following formulas.

(1) For airplanes that were originally Group 3 airplanes and later modified by installing a piston engine of greater than 600 horsepower and/or a hopper capacity of greater than 410 gallons, calculate the equivalent Group 1 hours TIS on each spar cap as follows:

$$(i) \text{ Usage factor} = \frac{\text{Total hrs. on cap pre-mod.}}{28,800} + \frac{\text{Additional hrs. on cap post-mod.}}{9,400}$$

$$(ii) \text{ Equivalent Group 1 hours TIS} = 9,400 \times \text{Usage Factor}$$

(2) For airplanes that were originally Group 3 airplanes and later modified by installing a turbine engine of greater than 600 horsepower, with or without installing a hopper with greater than 410 gallon capacity, calculate the equivalent Group 1 hours TIS on each spar cap as follows:

$$(i) \text{ Usage factor} = \frac{\text{Total hrs. on cap pre-mod.}}{28,800} + \frac{\text{Additional hrs. on cap post-mod.}}{6,200}$$

$$(ii) \text{ Equivalent Group 1 hours TIS} = 6,200 \times \text{Usage Factor}$$

(3) When the equivalent Group 1 hours TIS on the wing front lower spar cap equals the life limit of 9,400 hours TIS if a radial piston engine is installed or reaches 6,200 hours TIS if a turbine engine is installed, the wing front lower spar cap must be replaced. Use Table 6 if over the life limit.

(4) See the appendix to this AD for examples of how to calculate the applicable life limit.

(l) If any cracks are found during any inspection required by this AD, you must repair the cracks or replace the wing front lower spar cap before further flight.

(1) Use the cold work process to ream out small cracks as defined in Ayres Corporation Service Bulletin No. SB-AG-39, dated September 17, 1996, and deburr the bolt hole edges with the splice blocks removed after cold work is performed; or

(2) If the crack is found in a 1/4-inch bolt hole, ream the 1/4-inch bolt hole to 5/16 inches diameter as defined in Part I of Ayres Corporation Custom Kit No. CK-AG-29, dated December 23, 1997; or

(3) Install Kaplan splice blocks, P/N 22515-1/3 or P/N 88-251, following Quality Aerospace, Inc. Custom Kit No. CK-AG-30, dated December 6, 2001; or

(4) Replace the affected wing front lower spar cap following an FAA-approved procedure. Contact the FAA at the address in paragraph (t) of this AD to obtain an FAA-approved replacement procedure unless previously provided by the manufacturer at delivery of the airplanes. An alternative to replacing just the affected wing front lower spar cap is to replace both wing front lower spar caps and the surrounding structure following Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007. Another alternative to replacing just the affected wing front lower spar cap is to replace both wing front lower spar caps and the surrounding structure following Avenger Aircraft and Services FAA STC SA03654AT for Avenger Extended Performance Front Spar Enhancement Kit. You may obtain a copy of FAA STC SA03654AT at http://www.faa.gov/aircraft/air_cert/design_approvals/stc/. If you chose to install Thrush Custom Kit No. CK-AG-41, the FAA recommends installing Custom Kit No. CK-AG-41, Revision A, in its entirety although this is not mandatory. The additional structure provided in Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007, will provide a greater level of safety than the minimum acceptable level of safety provided by replacing just the wing front lower spar cap. If choosing to install the Avenger FAA STC kit, it is mandatory to install the entire FAA STC kit.

(m) If a crack is found, the reaming associated with the cold work process may remove a crack if it is small enough. Some aircraft owners/operators were issued AMOCs with AD 97-17-03 to ream the 1/4-inch bolt hole to 5/16 inches diameter to remove small cracks. Ayres Corporation Custom Kit No. CK-AG-29, Part I, dated December 23, 1997, also provides procedures to ream the 1/4-inch bolt hole to 5/16 inches diameter, which may remove a small crack. Resizing the holes to the required size to install a Kaplan splice block may also remove small cracks. If you use any of these methods to remove cracks and the airplane is re-inspected before further flight and no cracks are found, you may continue to follow the repetitive inspection intervals for your airplane listed in paragraphs (i)(5), (i)(6), or (i)(7) of this AD.

(n) For all inspection methods (magnetic particle or eddy current), hours TIS for initial and repetitive inspection intervals and wing front lower spar cap life limit start over when the wing front lower spar cap is replaced with a new P/N 20207-1, 20207-2, 20207-11, 20207-12, 20207-13, 20207-14, 20207-15, or 20207-16. These wing front lower spar caps must be inspected as specified in paragraphs (i)(3), (i)(5), (i)(6), and (i)(7) of this AD.

(1) If the wings or wing front lower spar caps were replaced with new or used wings or wing front lower spar caps during the life of the airplane and the logbook records positively show the hours TIS of the replacement wings or wing front lower spar caps, then initially inspect at applicable times specified in paragraph (i)(3) of this AD. Repetitively inspect thereafter at intervals specified paragraphs (i)(5), (i)(6), or (i)(7) of this AD. Replace the wing front lower spar caps upon reaching the life limit specified in Table 7 of this AD.

(2) If the wings or wing front lower spar caps were replaced with new or used wings or wing front lower spar caps during the life of the airplane and logbook records do not positively show the hours TIS of the replacement wings or wing front lower spar caps, then inspect within 50 hours TIS after February 24, 2010 (the effective date of this AD), unless already done. Repetitively inspect thereafter at intervals specified in paragraphs (i)(5), (i)(6), or (i)(7) of this AD. Replace the wing front lower spar caps within 500 hours TIS after February 24, 2010 (the effective date of this AD).

(3) If both wing front lower spar caps are replaced by installing the entire Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007, then initially inspect at 2,000 hours TIS as shown in paragraph (i)(3) of this AD. Repetitively inspect thereafter at intervals specified in paragraph (i)(7) of this AD. Replace the wing front lower spar caps at times specified in paragraph (i)(8) of this AD.

(o) Any wing front lower spar cap that is removed and is at or beyond the replacement time specified in this AD must be disposed of following the procedures in 14 CFR Part 43.10.

(p) Replacement times start over when the wing front lower spar cap is replaced with a new P/N 20207-1, 20207-2, 20207-11, 20207-12, 20207-13, 20207-14, 20207-15, or 20207-16. These wing front lower spar caps are now life-limited parts and must be replaced upon the accumulation of the hours TIS specified in Table 7 of this AD.

(q) Report any cracks you find within 10 days after the cracks are found or within 10 days after February 24, 2010 (the effective date of this AD), whichever occurs later. Send your report to Cindy Lorenzen, Aerospace Engineer, ACE-115A, Atlanta ACO, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5524; facsimile: (404) 474-5606; e-mail: cindy.lorenzen@

faa.gov. The Office of Management and Budget (OMB) approved the information collection requirements contained in this regulation under the provisions of the Paperwork Reduction Act and assigned OMB Control Number 2120-0056. Include in your report the following information:

- (1) Aircraft model and serial number;
- (2) Engine model;
- (3) Aircraft hours TIS;
- (4) Left and right wing front lower spar cap hours TIS;
- (5) Hours TIS on the spar cap since last inspection;
- (6) Crack location and size;
- (7) Procedure (magnetic particle, ultrasonic, or eddy current) used for the last inspection;
- (8) Description of any previous modifications and hours TIS when the modification was done, such as engine model change, installation of winglets, hopper capacity increase, cold working procedure done on bolt holes, installation of butterfly plates, or installation of Thrush Aircraft, Inc. Custom Kit No. CK-AG-41.

(r) Installation of the replacement wing front lower spar caps and other modification parts that are approved by FAA STC SA03654AT, Installation of Avenger Extended Performance Front Spar Enhancement Kit (new wing front spar lower caps, center splice and doublers), in accordance with Part II of Avenger Master Data List AAS-MDL-08-001, Revision B, dated November 26, 2008, terminates the actions required by this AD. The installation of FAA STC SA03654AT is an alternative to replacing the wing front lower spar caps with Ayres/Thrush wing front lower spar caps.

Special Flight Permits

(s) Under 14 CFR part 39.23, we are limiting the special flight permits for this AD by the following conditions:

- (1) The hopper is empty;
- (2) Vne is reduced to 126 miles per hour (109 knots) indicated airspeed (IAS); and
- (3) Flight into known turbulence is prohibited.

Alternative Methods of Compliance (AMOCs)

(t) The Manager, Atlanta Aircraft Certification Office, (ACO) FAA, ATTN: Cindy Lorenzen, Aerospace Engineer, ACE-115A, Atlanta ACO, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5524; facsimile: (404) 474-5606; e-mail: cindy.lorenzen@faa.gov; or William O. Herderich, Aerospace Engineer, ACE-117A, Atlanta ACO, 1701 Columbia Avenue, College Park, Georgia 30337; telephone: (404) 474-5547; facsimile: (404) 474-5606; e-mail: william.o.herderich@faa.gov, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. 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.

(u) AMOCs approved for AD 2006-07-15, AD 2003-07-01, AD 2000-11-16, AD 97-13-11, and/or AD 97-17-03 are approved as AMOCs for this AD except for those pertaining to ultrasonic inspection methods.

Material Incorporated by Reference

(v) You must use Ayres Corporation Service Bulletin No. SB-AG-39, dated September 17, 1996; Ayres Corporation Custom Kit No. CK-AG-29, dated December 23, 1997; Quality Aerospace, Inc. Custom Kit No. CK-AG-30, dated December 6, 2001; Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007; and Part II of Avenger Master Data List AAS-MDL-08-001, Revision B, dated November 26, 2008, 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 Thrush Aircraft, Inc. Custom Kit No. CK-AG-41, Revision A, dated March 8, 2007, and Part II of Avenger Master Data List AAS-MDL-08-001, Revision B, dated November 26, 2008, under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) On May 20, 2003 (68 FR 15653), the Director of the Federal Register approved the incorporation by reference of Quality Aerospace, Inc. Custom Kit No. CK-AG-30, dated December 6, 2001.

(3) On July 25, 2000 (65 FR 36055), the Director of the Federal Register approved the incorporation by reference of Ayres Corporation Service Bulletin No. SB-AG-39, dated September 17, 1996; and Ayres Corporation Custom Kit No. CK-AG-29, dated December 23, 1997.

(4) For service information identified in this AD, contact Thrush Aircraft, Inc., 300 Old Pretoria Road, P.O. Box 3149, Albany, Georgia 31706-3149, Internet: <http://www.thrushaircraft.com>. To obtain information about Avenger Master Data List AAS-MDL-08-001 and the optional installation of FAA STC SA03654AT, contact Avenger Aircraft and Services, 103 N. Main Street, Suite 106, Greenville, South Carolina 29601, Internet: <http://www.avengeraircraft.com>.

(5) 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.

(6) 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.

Appendix to AD 2009-26-11

The following are examples of calculating equivalent Group 1 hours.

Example 1: S/N xxx was originally a Group 3 airplane; later it was modified with a Wright R-1820-71, 1200 horsepower, radial engine when the wing front lower spar caps had 15,700 hours TIS on them. The wing front lower spar caps have accumulated an additional 8,200 hours since the engine conversion for a total of 23,900 hours TIS on the wing front lower spar caps.

Usage Factor = $15,700 \text{ hours} / 28,800 + 8,200 \text{ hours} / 9,400 = 1.417$
Equivalent Group 1 hours = $9,400 \times 1.417 = 13,320 \text{ hours}$.

The wing front lower spar caps will need to be replaced within the next 1,000 hours TIS after the effective date of this AD as determined by Table 6 for a Group 1 airplane with a radial engine with between 12,000 and 15,000 hours TIS.

Example 2: S/N yyy was originally a Group 3 airplane; later it was modified with a PT6A-34, 750 horsepower, turbine engine when the wing front lower spar caps had 5,300 hours TIS on them. The wing front lower spar caps now have 7,700 hours TIS.

Usage Factor = $5,300 \text{ hours} / 28,800 + (7,700 - 5,300) / 6,200 = 0.571$
Equivalent Group 1 hours = $6,200 \times 0.571 = 3,540 \text{ hours}$.

The wing front lower spar caps will need to be replaced at 6,200 equivalent Group 1 total hours TIS, which is within the next 2,660 hours TIS ($6,200 - 3,540 = 2,660$).

Issued in Kansas City, Missouri, on January 8, 2010.
Margaret Kline,
Acting Manager, Small Airplane Directorate,
Aircraft Certification Service.



2010-02-07 Eurocopter France: Amendment 39-16177. Docket No. FAA-2010-0047; Directorate Identifier 2009-SW-28-AD. Supersedes AD 2003-15-51, Amendment 39-13276, Docket No. 2003-SW-34-AD.

Applicability:

Eurocopter France Model SE3160, SA315B, SA316B, SA316C, and SA319B helicopters, with main rotor blade (blade) part number L3160-100-01, serial number (S/N) 600 through 671 (except those identified with both "SB L3160-P-001A" and "SB L3160-P-001B" next to the blade data plate), produced under a Parts Manufacturer Approval based on Supplemental Type Certificate SH778GL, installed, certificated in any category.

Compliance:

Required as indicated.

To prevent failure of a blade and subsequent loss of control of the helicopter, do the following:

(a) Within 10 hours time-in-service (TIS), unless accomplished previously, tap and visually inspect each blade, S/N 600 through 666, 668 through 669, and 671 (except those identified with "SB L3160-P-001A" next to the blade data plate) in the root doublers for a void and in the forward and aft edges for a paint crack in the areas depicted in Figure 1 of Phlight of Phancy Corp. Service Bulletin No. SB L3160-P-001, dated May 20, 2009 (SB), and by following the Accomplishment Instructions, Part A, paragraph 2.a. through 2.e., of the SB.

(1) If there is no void or paint crack in the root doublers or fitting, and the only void you find is isolated in the .25 inch edge band of a doubler or a fitting as depicted in Figure 1 of the SB, repeat the inspection at intervals not to exceed 30 hours TIS.

(2) If you find a void in any doubler or any root fitting not isolated to the .25 inch band as depicted in Figure 1 of the SB or a paint crack of any length along the forward or aft edge of a root fitting between Blade Stations 35.02 and 42.52, replace the blade with an airworthy blade before further flight.

(b) Within 10 hours TIS, unless accomplished previously, inspect each blade, S/N 600 through 671 (except those identified with "SB L3160-P-001B" next to the blade data plate), in the areas depicted in Figures 2 and 3 and by following the Accomplishment Instructions, Part B, of the SB as follows:

(1) Remove the paint and coin tap inspect the upper and lower surface of the No. 2 spar to tip weight housing bond as depicted in Figure 2 of the SB for a bond void. Conduct the inspection by following the Accomplishment Instructions, Part B, paragraphs 2.a. through 2.e. of the SB.

(2) Using a 10X or higher magnifying glass, visually inspect the No. 1 spar around the through pins for hole elongation, a crack in the spar, and pin movement (pins should be flush with

upper and lower spar surfaces). Visually inspect the tip weight housing outboard face for evidence of movement relative to the spar (tip weight housing should be flush with the face of No. 1 and 2 spars).

(3) Measure the thickness of the upper and lower spar by using calipers held against the face of the No. 1 spar in alignment with the through pins as depicted in Figure 3 of the SB.

(4) If you find any of the following, replace the blade with an airworthy blade before further flight:

(i) A void between the No. 2 spar and tip weight housing;

(ii) In the No. 1 spar, either a crack, an elongated through pinhole, movement of a through pin, or a through pin that is not flush with the spar surface;

(iii) Movement of the tip weight housing or a tip weight housing that is not flush with the No. 1 and No. 2 spar; or

(iv) An upper or lower spar with thickness less than 0.045 inch.

(5) If you do not find any of the discrepancies identified in paragraph (b)(4)(i) through (b)(4)(iv) of this AD, repeat the inspections required by paragraph (b) of this AD at intervals not to exceed 30 hours TIS.

(c) Replacing an affected blade with an airworthy blade with a serial number that is not included in the "Applicability" section of this AD constitutes terminating action for the requirements 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, Rotorcraft Directorate, Rotorcraft Certification Office, ATTN: DOT/FAA Southwest Region, Martin Crane, ASW-170, Aviation Safety Engineer, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5170, fax (817) 222-5783, for information about previously approved alternative methods of compliance.

(e) Special flight permits will not be issued.

(f) The Joint Aircraft System/Component (JASC) Code for the subject of this AD is Code 6210: Main rotor blades.

(g) Inspect the blades by following the specified portions of the Phlight of Phancy Corp. Service Bulletin SB L3160-P-001, dated May 20, 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 Phlight of Phancy Corp., 791 Westport Parkway, Fort Worth, Texas 76177-4511, telephone 817-491-6755, fax 817-491-6759. 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.

(h) This amendment becomes effective on February 12, 2010.

Issued in Fort Worth, Texas, on January 8, 2010.

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



2010-02-08 Turbomeca: Amendment 39-16178; Docket No. FAA-2010-0009; Directorate Identifier 2010-NE-01-AD.

Effective Date

- (a) This airworthiness directive (AD) becomes effective February 3, 2010.

Affected ADs

- (b) None.

Applicability

(c) This AD applies to Turbomeca Turmo IV A and IV C turboshaft engines that have incorporated Turbomeca Modification TU 233. These engines are installed on, but not limited to, Eurocopter SA 330F, G, or J PUMA helicopters.

Reason

(d) During a maintenance inspection before the first flight of the day, an oil leak was found on an engine deck. A circumferential crack on the intermediate bearing return flexible pipe union (pipe part number 9 560 17 606 0) was identified as the origin of the leak. A similar oil pipe union crack was then reported at the same location on another engine, on the same pipe part number. This pipe part number was approved as Modification TU 233 in 2008.

Although such cracks have been detected and did not lead to an in-service event, the possibility exists that some additional cracks could occur and may not be detected before the potential complete rupture of the union.

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 helicopter engine in-flight shutdown resulting in an emergency auto-rotation landing or accident.

Actions and Compliance

(e) Unless already done, do the following actions.

(1) Before the next flight after the effective date of this AD, and thereafter daily after the last flight of the day until further notice, visually inspect for absence of oil leakage or seepage from both unions of the intermediate bearing return flexible pipes, part number 9 560 17 606 0.

(2) If any oil leakage or seepage is found, disassemble the pipe and visually inspect the unions.

(3) If no crack is found, re-install the pipe.

(4) If any crack is found, remove the pipe from service and replace it.

(5) The actions required by paragraph (e)(1) of this AD may be performed by the owner/operator holding at least a private pilot certificate, and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR 43.9 and 91.417(a)(2)(v).

FAA AD Differences

(f) None.

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 Airworthiness Directive 2009-0261-E, dated December 18, 2009, and Turbomeca Alert Mandatory Service Bulletin No. A249 72 0809, Version A, dated December 15, 2009, for related information. Contact Turbomeca S.A., 40220 Tarnos, France; e-mail: noria-dallas@turbomeca.com; telephone 33 05 59 74 40 00, fax 33 05 59 74 45 15, or go to: <http://www.turbomeca-support.com>, for a copy of this service information.

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

Material Incorporated by Reference

(j) None.

Issued in Burlington, Massachusetts, on January 12, 2010.
Peter A. White,
Assistant Manager, Engine and Propeller Directorate,
Aircraft Certification Service.



2010-03-01 Eurocopter France: Amendment 39-16184. Docket No. FAA-2009-1146; Directorate Identifier 2008-SW-38-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective on February 12, 2010.

Other Affected ADs

(b) None.

Applicability

(c) This AD applies to Model AS332L1, AS332L2, and EC225LP helicopters with the following seat harnesses, fitted with blanking plugs, part number (P/N) 332V85134620 or P/N 332V85134621, except seat harnesses modified by Eurocopter MOD 332V080169, installed, certificated in any category:

Harness manufacturer	Seat harness P/N
Schroth	P/N 1-10-725203
	P/N 1-10-P65203
	On Fisher Harmony single seats, P/N 03140000011X205 (Eurocopter P/N 704A41210112).
	On Fisher Harmony two-seat benches, P/N 03150000011XX205 (Eurocopter P/N 704A41210113).

AM-SAFE

P/N 503583-407-2251

P/N 503583-408-2251

On Sicma single seats with the following P/Ns:

P/N 17911-02-00 (Eurocopter P/N 704A41210102).

P/N 17911-03-00 (Eurocopter P/N 704A41210105).

P/N 17912-02-00 (Eurocopter P/N 704A41210103).

P/N 17912-03-00 (Eurocopter P/N 704A41210106).

On Sicma two-seat benches with the following P/Ns:

P/N 17920-02-00 (Eurocopter P/N 704A41210104).

P/N 17920-03-00 (Eurocopter P/N 704A41210107).

P/N 504729-401-2251 on rear bench seats (all P/Ns).

Note: Embodiment of MOD 332V080169 can be checked visually by verifying that no blanking plug is fitted on the 5th attachment point of the buckle plus verifying that aircraft records indicate the blanking plug has been removed by following MOD 332V080169.

Reason

(d) The mandatory continuing airworthiness information (MCAI) states: "Recently, a report was received concerning the discovery of fragments of a plastic blanking plug (fitted to the harness belt buckle 5th attachment point) inside a seat harness belt buckle. Over time, this blanking plug hardens and becomes brittle. This condition, if not corrected, can lead to failure of the plug and fragments being caught inside the buckle, causing interference and preventing the belt from being released during an emergency evacuation of the aircraft."

Actions and Compliance

(e) Required as indicated, unless accomplished previously, do the following:

(1) Within 30 days, pry out the blanking plug from each seat harness belt buckle.

(2) If the removed blanking plug has deteriorated (fragmented), before further flight, replace the belt buckle with an airworthy belt buckle without a plastic blanking plug. Do this replacement as depicted in Figures 7 and 8 for the "AM-SAFE" belt buckle and Figure 9 for the "SCHROTH" belt buckle of Eurocopter Emergency Alert Service Bulletin (ASB) No. 01.00.72 for the Model AS332L1 and L2 and ASB No. 04A003 for the Model EC225LP helicopters, both dated April 15, 2008. To replace a belt buckle, follow the Accomplishment Instructions, paragraph 2.B.2.b. of ASB 01.00.72 or ASB 04A003, both dated April 15, 2008, as applicable to your model helicopter, except this AD does not require you to return the harness belt buckle to the manufacturer.

(i) Conduct a buckle fastening release test to ensure the buckle works correctly.

(ii) Inspect the positioning of the seat harness belt on the buckle to assure that it is as depicted in Figure 6 of the ASB, as applicable to your model helicopter.

(3) If the blanking plug has not deteriorated, return the buckle to service without the blanking plug.

Note: This modifies the buckle to be airworthy without the blanking plug.

Differences Between This AD and the MCAI AD

(f) This AD does not require you to return the harness belt buckle to the manufacturer. Also, we use a compliance time of 30 days rather than 1 month.

Other Information

(g) The Manager, Safety Management Group, FAA, ATTN: George Schwab, Aviation Safety Engineer, Rotorcraft Directorate, Fort Worth, Texas 76137, telephone (817) 222-5114, 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

(h) European Aviation Safety Agency (EASA) AD No. 2008-0075, dated April 22, 2008, contains related information.

Joint Aircraft System/Component (JASC) Code

(i) JASC Code 2500: Cabin Equipment & Furnishings.

Material Incorporated by Reference

(j) You must use the specified portions of Eurocopter Emergency Alert Service Bulletin No. 01.00.72 for the Model AS332L1 and L2 helicopters and No. 04A003 for the Model EC225LP helicopters, both dated April 15, 2008, 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 (972) 641-3460, fax (972) 641-3527, or at <http://www.eurocopter.com>.

(3) You may review copies at the FAA, Rotorcraft Directorate, Fort Worth, Texas 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 November 24, 2009.

Lance T. Gant,
Acting Manager, Rotorcraft Directorate,
Aircraft Certification Service.



2010-03-02 Lifesaving Systems Corp.: Amendment 39-16185. Docket No. FAA-2009-1148; Directorate Identifier 2009-SW-36-AD.

Effective Date

(a) This airworthiness directive (AD) becomes effective on February 11, 2010.

Other Affected ADs

(b) None.

Applicability

(c) This AD applies to all helicopters, which have a rescue hoist assembly installed that contains a Lifesaving Systems Corp. D-Lok Hook assembly, part number (P/N) 410-A or 410-F, lot number 208 or 1108. These hooks are installed on but not limited to Goodrich Rescue Hoist Assembly P/N 42325-16-4, 42325-16-5, 44301-10 series, 44315-10, 44307-480, 44307-481, 44316-12-101, 44316-10-101, 42325-12 series, 42325-14 series, 44311-10 series, 712768-240-D 76370-140-D and 76378-260-D; and Breeze-Eastern Corporation Rescue Hoist Assembly, P/N BLH-20200-504 series.

Reason

(d) The mandatory continuing airworthiness information (MCAI) AD states that rescue hoist operators have reported surface irregularities and discontinuities on certain D-Lok Hooks supplied by Lifesaving Systems because of an unapproved change in the hook design and manufacturing process from forged material to cast material that have different physical properties. The actions are intended to prevent failure of a hook during rescue hoist operations, loss of the rescued passenger, and subsequent serious injury or fatality.

Actions and Compliance

(e) Within 200 hoist lifts, unless already done, replace each affected D-Lok Hook assembly with an airworthy hook assembly other than D-Lok Hook assembly, P/N 410-A or 410-F, lot number 208 or 1108.

Differences Between This AD and the MCAI AD

(f) The latest MCAI AD requires a visual inspection to determine whether the affected hook assembly has surface irregularities and discontinuities that exceed certain manufacturer limits. If it is within limits, the MCAI AD requires replacing the D-Lok Hook within 30 days from July 11, 2009,

or upon reaching 1000 total lift cycles since installation of the affected lock, whichever occurs first. This AD does not require an inspection and requires replacing each affected D-Lok Hook within 200 lift cycles. Also, the MCAI AD is limited to Agusta, Eurocopter, and Sikorsky helicopters, and this AD applies to all helicopters with a Lifesavings Systems Corp. D-Lock Hook Assembly, P/N 410-A or 410-F, lot number 208 or 1108, installed.

Other Information

(g) 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

(h) EASA MCAI AD No. 2009-0124, dated June 12, 2009; 2009-0148-E, dated July 9, 2009; 2009-0179-E, dated August 11, 2009; 2009-0183-E, dated August 14, 2009; and Goodrich Service Bulletin (SB) 42315-489-01, Revision 1, dated June 5, 2009 and Breeze-Eastern Corporation SB BLH-20200-504-25-01, dated June 12, 2009, contain related information.

Joint Aircraft System/Component (JASC) Code

(i) JASC Code 2520: Passenger Compartment Equipment.

Dated: Issued in Fort Worth, Texas, on January 20, 2010.

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