

**DEPARTMENT OF TRANSPORTATION****Federal Aviation Administration****14 CFR Part 39**

[Docket No. 2003-SW-20-AD; Amendment 39-13181; AD 2003-08-53]

RIN 2120-AA64

**Airworthiness Directives; Eurocopter France Model SA-365N1, AS365-N2, AS 365 N3, and SA-366G1 Helicopters**

**AGENCY:** Federal Aviation Administration, DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** This document publishes in the **Federal Register** an amendment adopting a superseding Airworthiness Directive (AD) 2003-08-53, sent previously to all known U.S. owners and operators of the specified Eurocopter France (Eurocopter) model helicopters by individual letters. This AD requires, in addition to the checks and tapping test inspections required in the existing AD, adding the Eurocopter Model AS 365 N3 to the applicability and correcting tail rotor blade (blade) part numbers. Also, this AD requires doing tapping tests for bonding separation on blades and removing certain blades at specified intervals. The actions specified by this AD are intended to prevent failure of a blade, loss of tail rotor control, and subsequent loss of control of the helicopter.

**DATES:** Effective June 20, 2003, to all persons except those persons to whom it was made immediately effective by Emergency AD 2003-08-53, issued on April 23, 2003, which contained the requirements of this amendment.

Comments for inclusion in the Rules Docket must be received on or before August 4, 2003.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 2003-SW-20-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137. You may also send comments electronically to the Rules Docket at the following address: *9-asw-adcomments@faa.gov*.

**FOR FURTHER INFORMATION CONTACT:** Gary Roach, Aviation Safety Engineer, FAA, Rotorcraft Directorate, Regulations Group, Fort Worth, Texas 76193-0111, telephone (817) 222-5130, fax (817) 222-5961.

**SUPPLEMENTARY INFORMATION:** On May 9, 2000, the FAA issued AD 2000-10-08, Amendment No. 39-11732 (65 FR 31256, May 17, 2000), to require

inspecting each blade for bonding separation, measuring the clearance between the tip of each blade and the circumference of the air duct, and replacing a blade if necessary. After issuing that AD, based on further analysis, we determined that a pilot should be able to check for a cracked, blistered, or wrinkled blade and that some debonding of the blade is acceptable and issued AD No. 2000-10-08R1 on September 25, 2001 (66 FR 50307, October 3, 2001), which amended AD No. 2000-10-08.

On April 23, 2003, we issued Emergency AD 2003-08-53 for the specified model helicopters, which requires, in addition to the checks and tapping test inspections required in the existing AD, adding the Eurocopter Model AS 365 N3 to the applicability, correcting blade part numbers, additional tapping tests for bonding separation on blades at specified intervals, and removing certain blades at specified intervals. That action was prompted by reports of an incident involving failure of the blade and an in-flight failure of a blade due to a fatigue crack. This condition, if not corrected, could result in failure of a blade, loss of tail rotor control, and subsequent loss of control of the helicopter.

The FAA has reviewed Edition No. 1, Revision No. 0, of Eurocopter Alert Service Bulletin No. 05.09 for Model SA366G1 helicopters and No. 05.00.17 for Model AS 365 N1 and N2 helicopters, both dated April 16, 2003, which describe procedures for blade monitoring and limitations.

The Direction Generale De L'Aviation Civile (DGAC), the airworthiness authority for France, notified the FAA that an unsafe condition may exist on these helicopter models. The DGAC advises that fatigue failure of the Kevlar tie bar of a blade and loss of the anti-torque function led to an accident. The DGAC classified the alert service bulletins as mandatory and issued AD Nos. T2003-155(A) for Eurocopter Model AS 365 N helicopters and T2003-156(A) for Eurocopter Model SA 366 helicopters, both dated April 17, 2003, to ensure the continued airworthiness of these helicopters in France.

These helicopter models are manufactured in France and 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, the DGAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the DGAC, 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.

Since the previously described unsafe condition is likely to exist or develop on other Eurocopter model helicopters of these same type designs, the FAA issued Emergency AD 2003-08-53 to prevent failure of a blade, loss of tail rotor control, and subsequent loss of control of the helicopter. Therefore, in addition to the checks and tapping test inspections required in AD 2000-10-08R1, this AD requires the following:

- Add the Eurocopter Model AS 365 N3 to the applicability.
- Correct blade, P/N 365A12-0020-all dash numbers, to P/N 365A12-0020-00, -01, -02, or -03.
- At intervals not to exceed 25 hours time-in-service (TIS), do tapping tests for bonding separation on blades.
- Within 10 hours TIS, remove blades with 150 or more hours TIS.
- On or before 160 hours TIS, remove blades with less than 150 hours TIS.

This AD revises the Airworthiness Limitations section of the maintenance manual by establishing a 160-hour TIS life limit for blades, P/N 365A12-0020-02 and 365A12-0020-03, with a serial number (S/N) equal to or greater than 32944, except for S/N 32963 through 33091, S/N 33116 through 33187, and S/N 33232 through 33319.

The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the controllability or structural integrity of the helicopter. Therefore, adding the Eurocopter Model AS 365 N3 to the applicability; correcting the blade part numbers; conducting tapping tests at intervals not to exceed 25 hours TIS; within 10 hours TIS, removing blades with 150 or more hours TIS; and on or before 160 hours TIS, removing blades with less than 150 hours TIS are required, and this AD must be issued immediately.

An owner/operator (pilot) may perform the visual checks for a crack, blister, or wrinkle in the blade. Pilots may perform these checks because they require no tools and can be accomplished by observation and may be performed equally well by a pilot or a mechanic. However, the pilot must enter compliance with those requirements into the helicopter maintenance records in accordance with 14 CFR 43.11 and 91.417(a)(2)(v).

Since it was found that immediate corrective action was required, notice and opportunity for prior public comment thereon were impracticable and contrary to the public interest, and good cause existed to make the AD

effective immediately by individual letters issued on April 23, 2003, to all known U.S. owners and operators of the specified Eurocopter model helicopters. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to 14 CFR 39.13 to make it effective to all persons.

On July 10, 2002, the FAA issued a new version of 14 CFR part 39 (67 FR 47997, July 22, 2002), which governs the FAA's AD system. The regulation now includes material that relates to altered products, special flight permits, and alternative methods of compliance. Because we have now included this material in part 39, we no longer need to include it in each individual AD.

The FAA estimates that this AD will affect 34 helicopters of U.S. registry and take approximately 4 work hours per helicopter to replace the blades at an average labor rate of \$60 per work hour. Required parts will cost approximately \$3,527 per blade. At 11 blades per helicopter, the cost per helicopter is \$38,797. Based on these figures, we estimate the total cost impact of the AD to be \$1,327,258, assuming 11 blades are replaced and assuming no additional cost for the pilot check. Eurocopter has stated in service documents that they are supplying replacement blades at no cost, which would result in a cost to the operator of \$240 per helicopter and \$8,160 for the fleet.

#### Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications should identify the Rules Docket number and be submitted in triplicate to the address specified under the caption **ADDRESSES**. All communications received on or before the closing date for comments will be considered, and this rule may be amended in light of the comments

received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their mailed comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket No. 2003-SW-20-AD." The postcard will be date stamped and returned to the commenter.

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy

of it, if filed, may be obtained from the Rules Docket at the location provided under the caption **ADDRESSES**.

#### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

#### Adoption of the Amendment

■ Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

#### PART 39—AIRWORTHINESS DIRECTIVES

■ 1. The authority citation for part 39 continues to read as follows:

**Authority:** 49 U.S.C. 106(g), 40113, 44701.

#### § 39.13 [Amended]

■ 2. Section 39.13 is amended by adding a new airworthiness directive to read as follows:

#### 2003-08-53 Eurocopter France:

Amendment 39-13181. Docket No. 2003-SW-20-AD. Supersedes AD 2000-10-08, Amendment 39-11732, and 2000-10-08R1, Amendment 39-12452, both Docket No. 99-SW-34-AD.

*Applicability:* Model SA-365N1, AS365-N2, AS 365 N3, and SA-366G1 helicopters, with a tail rotor blade (blade), part number 365A33-2131-all dash numbers; 365A12-0010-all dash numbers; or 365A12-0020-00, -01, -02, or -03; installed, certificated in any category.

*Compliance:* Required as indicated, unless accomplished previously.

To prevent failure of a blade, loss of tail rotor control, and subsequent loss of control of the helicopter, accomplish the following:

(a) Within 10 hours time-in-service (TIS) and thereafter before the first flight of each day, visually check each blade for a crack, blister, or wrinkling. An owner/operator (pilot), holding at least a private pilot certificate, may perform the visual check and must enter compliance into the aircraft maintenance records in accordance with 14 CFR sections 43.11 and 91.417(a)(2)(v)). See Figure 1 as follows:

**BILLING CODE 4910-13-P**

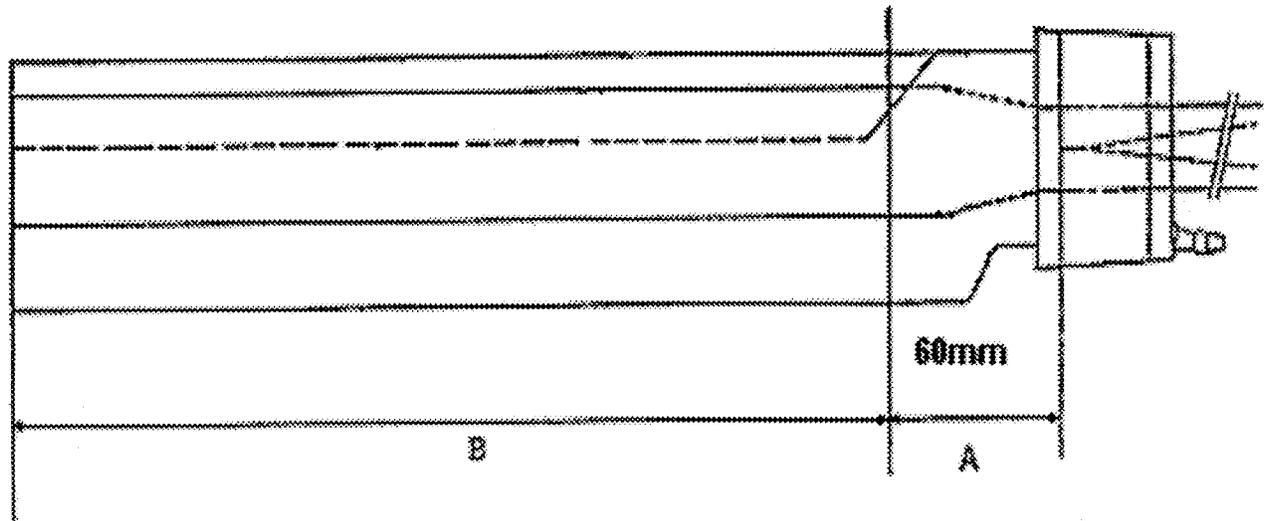


Figure 1

(b) If a crack, blister, or wrinkling is found as a result of the visual check, accomplish the following before further flight (see Figure 1 of this AD):

(1) Zone A: If a blister is detected on the blade suction face, conduct a tapping test inspection on the whole blade for bonding separation.

(i) For blades, P/N 365A33-2131-all dash numbers, 365A12-0010-all dash numbers, and 365A12-0020-00, and -01, if bonding separation or a crack is found, replace the blade with an airworthy blade before further flight.

(ii) For blades, P/N 365A12-0020-02, and -03, if bonding separation exceeds 900 mm<sup>2</sup> in a 30 x 30 mm square or if there is a crack, replace the blade with an airworthy blade before further flight.

(2) Zone B: If a crack, wrinkling, or a blister is found, replace the blade with an airworthy blade before further flight.

(c) Within 10 hours TIS, conduct a tapping test inspection on each blade. If there is bonding separation that exceeds the criteria in paragraphs b(1)(i) and b(1)(ii) of this AD, replace the blade with an airworthy blade before further flight.

**Note 1:** Edition No. 1, Revision No. 0, of Eurocopter France Service Bulletin Nos. 05.09 and 05.00.17, both dated April 16, 2003, pertain to the subject of this AD.

(1) Thereafter, at intervals not to exceed 25 hours TIS or every 50 cycles (each takeoff and landing equals 1 cycle), whichever occurs first, conduct a tapping test inspection for bonding separation on all blades with a serial number (S/N) less than 18912, and blades, P/N 365A12-0020-00 or 365A12-0020-01, with a S/N equal to or greater than 18912. If bonding separation or a crack is found, replace the blade with an airworthy blade before further flight.

(2) Thereafter, at intervals not to exceed 25 hours TIS, conduct a tapping test inspection for bonding separation on blades, P/N 365A12-0020-02 or 365A12-0020-03, in Zone A as depicted in Figure 1 of this AD.

(i) If bonding separation exceeds the criteria specified in paragraph (b)(1)(ii) of this AD or if a crack is found, replace the blade with an airworthy blade before further flight.

(ii) If bonding separation is present and within tolerance of the criteria specified in paragraph (b)(1)(ii) of this AD, conduct a tapping test before the first flight of the day and as often as necessary during the day ensuring that the TIS between tapping tests does not exceed 10 hours TIS between tapping tests.

(iii) Within 25 hours TIS after the discovery of skin debonding in Zone A,

remove and replace the blade with an airworthy blade.

(3) Thereafter, at intervals not to exceed 100 hours TIS or 200 cycles, whichever occurs first, conduct a tapping test inspection for bonding separation on blades, P/N 365A12-0020-02 or 365A12-0020-03, in Zone B as depicted in Figure 1 of this AD. If a crack, wrinkling, or a blister is found, replace the blade with an airworthy blade before further flight.

(d) Within 10 hours TIS, and thereafter at intervals not to exceed 100 hours TIS or 200 cycles, whichever occurs first, measure the blade-to-air duct clearance. If the clearance is less than 3 mm, replace the blade with an airworthy blade before further flight.

(e) For blades, P/N 365A12-0020-02 or 365A12-0020-03, with a S/N equal to or greater than 32944, except for S/N 32963 through 33091, S/N 33116 through 33187, or S/N 33232 through 33319:

(1) Within 10 hours TIS, replace blades with 150 or more hours TIS with an airworthy blade.

(2) On or before 160 hours TIS, replace blades with less than 150 hours TIS with an airworthy blade.

(f) This AD revises the Limitations section of the maintenance manual by establishing a 160-hour TIS life limit for blades, P/N 365A12-0020-02 and 365A12-0020-03, with a S/N equal to or greater than 32944, except for S/N 32963 through 33091, S/N 33116 through 33187, and S/N 33232 through 33319.

(g) 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 Regulations Group, Rotorcraft Directorate, FAA, for information about previously approved alternative methods of compliance.

(h) This amendment becomes effective on June 20, 2003, to all persons except those persons to whom it was made immediately effective by Emergency AD 2003-08-53, issued April 23, 2003, which contained the requirements of this amendment.

**Note 2:** The subject of this AD is addressed in Direction Generale De L'Aviation Civile (France) AD Nos. T2003-155(A) and T2003-156(A), both dated April 17, 2003.

Issued in Fort Worth, Texas, on May 28, 2003.

**David A. Downey,**

*Manager, Rotorcraft Directorate, Aircraft Certification Service.*

[FR Doc. 03-14134 Filed 6-4-03; 8:45 am]

**BILLING CODE 4910-13-P**

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 2003-NE-21-AD; Amendment 39-13183; AD 2003-11-23]

RIN 2120-AA64

#### Airworthiness Directives; International Aero Engines AG (IAE) V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, and V2530-A5 Turbofan Engines

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule; request for comments.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for certain IAE V2522-A5, V2524-A5, V2527-A5, V2527E-A5, V2527M-A5, and V2530-A5 turbofan engines. This AD requires initial and repetitive inspections of the master magnetic chip detector (MCD) or the No. 1, 2, 3 bearing chamber MCD. This AD is prompted by reports of No. 3 bearing failures that resulted in in-flight engine shutdowns (IFSDs) and significant smoke in the cockpit and cabin. The actions specified in this AD are intended to prevent failure of the No. 3 bearing, which could result in IFSDs and smoke in the cockpit and cabin.

**DATES:** Effective June 20, 2003.

We must receive any comments on this AD by August 4, 2003.

**ADDRESSES:** Use one of the following addresses to submit comments on this AD:

- By mail: The Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2003-NE-21-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

- By fax: (781) 238-7055.

- By e-mail: [9-ane-adcomment@faa.gov](mailto:9-ane-adcomment@faa.gov).

You may get the service information referenced in this AD from International Aero Engines AG, 400 Main Street, East Hartford, CT 06108; telephone: (860) 565-5515; fax: (860) 565-5510.

You may examine the AD docket at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA.

**FOR FURTHER INFORMATION CONTACT:** Glorienne Niebuhr, Aerospace Engineer, Engine Certification Office, FAA, Engine and Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; telephone (781) 238-7132; fax (781) 238-7199.