

## DEPARTMENT OF TRANSPORTATION

## Federal Aviation Administration

## 14 CFR Part 39

RIN 2120-AA64

[Docket No. 98-SW-39-AD; Amendment 39-11038; AD 99-04-14]

**Airworthiness Directives; Schweizer Aircraft Corporation Model 269C-1 Helicopters**

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to Schweizer Aircraft Corporation Model 269C-1 helicopters, that requires a visual inspection of the bond line between the main rotor blade (blade) abrasion strip (abrasion strip) and the blade for voids, separation, or lifting of the abrasion strip; a visual inspection of the adhesive bead around the perimeter of the abrasion strip for erosion, cracks, or blisters; a tap (ring) test of the abrasion strip for debonding or hidden corrosion voids; and removal of any blade with an unairworthy abrasion strip and replacement with an airworthy blade. This amendment is prompted by four reports that indicate that debonding and corrosion have occurred on certain blades where the abrasion strip attaches to the blade skin. The actions specified by this AD are intended to prevent loss of the abrasion strip from the blade and subsequent loss of control of the helicopter.

**EFFECTIVE DATE:** March 23, 1999.

**FOR FURTHER INFORMATION CONTACT:** Raymond Reinhardt, Aerospace Engineer, FAA, New York Aircraft Certification Office, Airframe and Propulsion Branch, Engine and Propeller Directorate, 10 Fifth Street, 3rd Floor, Valley Stream, New York 11581-1200, telephone (516) 256-7532, fax (516) 568-2716.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that is applicable to Schweizer Aircraft Corporation and Hughes Helicopters, Inc. Model 269C-1 helicopters was published in the **Federal Register** on November 10, 1998 (63 FR 62973). That action proposed to require a visual inspection of the bond line between the blade abrasion strip and the blade for voids, separation, or lifting of the abrasion strip; a visual inspection of the adhesive bead around the perimeter of the abrasion strip for erosion, cracks, or blisters; a tap (ring)

test of the abrasion strip for debonding or hidden corrosion voids; and removal of any blade with an unairworthy abrasion strip and replacement with an airworthy blade.

Interested persons have been afforded an opportunity to participate in the making of this amendment. Due consideration has been given to the comments received. One commenter states that the references to Hughes Helicopters are unnecessary because the helicopter was, in fact, designed and certificated by Schweizer Aircraft Corporation. The FAA concurs and has removed "Hughes Helicopters" from the AD. The same commenter states that a serial number listed in the applicability paragraph is incorrectly referenced as "S508" and that it should be "S509." The FAA does not concur because the number is correctly referenced as "S509." Additionally, in the terminating action paragraph (d) "repair" has been replaced with "rebonding" to more specifically state what repair constitutes terminating action.

After careful review of the available data, including the comments noted above, the FAA has determined that air safety and the public interest require the adoption of the rule with the changes described previously. The FAA has determined that these changes will neither increase the economic burden on any operator nor increase the scope of the AD.

The FAA estimates that 47 helicopters of U.S. registry will be affected by this AD, that it will take approximately one-third of a work hour per helicopter to conduct the initial inspections; approximately one-third of a work hour to conduct the repetitive inspections; approximately 11 work hours to remove and reinstall a blade; and approximately 32 work hours to repair the blade; and that the average labor rate is \$60 per work hour. Required parts (replacement abrasion strips) will cost approximately \$57 per main rotor abrasion strip (each helicopter has three main rotor blades). Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$65,168 per year for the first year and approximately \$64,228 for each of the next 5 years thereafter, assuming 24 of the affected blades (approximately 1/6 of the fleet or the blades on 8 helicopters) in the fleet are removed, repaired, and reinstalled with replacement abrasion strips each year, and that all affected helicopters are subjected to one repetitive inspection each year, including the first year.

The regulations adopted herein will not have substantial direct effects 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, in accordance with Executive Order 12612, it is determined that this final rule does not have sufficient federalism implications to warrant the preparation of a Federalism Assessment.

For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A final evaluation has been prepared for this action and it is contained in the Rules Docket. A copy of it may be obtained from the Rules Docket at the FAA, Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 98-SW-39-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**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:

**AD 99-04-14 Schweizer Aircraft**

**Corporation:** Amendment 39-11038.  
Docket No. 98-SW-39-AD.

**Applicability:** Model 269C-1 helicopters with main rotor blades, P/N 269A1185-1, S/N S222, S312, S313, S325, S326, S327, S339, S341, S343, S346, S347, S349 through S367, S369 through S377, S379 through S391, S393, S394, S395, S397, S399, S401 through S417, S419 through S424, S426 through S449, S451 through S507, S509 through S513, S516 through S527, S529 through S540, S542, S544 through S560, S562 through S584, S586 through S595, S597 through S611, S620 through S623, S625, S628, S633, S641 through S644, S646, S653, S658, S664, S665, and S667, installed, certificated in any category.

**Note 1:** This AD applies to each helicopter identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For helicopters that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must use the authority provided in paragraph (e) to request approval from the FAA. This approval may address either no action, if the current configuration eliminates the unsafe condition, or different actions necessary to address the unsafe condition described in this AD. Such a request should include an assessment of the effect of the changed configuration on the unsafe condition addressed by this AD. In no case does the presence of any modification, alteration, or repair remove any helicopter from the applicability of this AD.

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

To prevent loss of the abrasion strip from a main rotor blade (blade) and subsequent loss of control of the helicopter, accomplish the following:

(a) Within the next 50 hours time-in-service (TIS), or within 90 calendar days after the effective date of this AD, whichever is earlier, or prior to installing an affected replacement blade, and thereafter at intervals not to exceed 50 hours TIS from the date of the last inspection or replacement installation:

(1) Visually inspect the adhesive bead around the perimeter of each abrasion strip for erosion, cracks, or blisters.

(2) Visually inspect the bond line between each abrasion strip and each blade skin for voids, separation, or lifting of the abrasion strip.

(3) Inspect each abrasion strip for debonding or hidden corrosion voids using a tap (ring) test as described in the applicable maintenance manual.

(b) If any deterioration of an abrasion strip adhesive bead is discovered, prior to further flight, restore the bead in accordance with the applicable maintenance manual.

(c) If abrasion strip debonding, separation, or a hidden corrosion void is found or suspected, prior to further flight, remove the blade with the defective abrasion strip and replace it with an airworthy blade.

(d) Rebonding of an affected blade's abrasion strip is considered a terminating action for the requirements of this AD for that blade. Identify a blade that has a rebonded strip by adding a white dot adjacent to the blade S/N.

(e) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, New York Aircraft Certification Office, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, New York Aircraft Certification Office.

**Note 2:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the New York Aircraft Certification Office.

(f) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the helicopter to a location where the requirements of this AD can be accomplished, provided the abrasion strip has not started to separate or debond from the main rotor blade.

(g) This amendment becomes effective on March 23, 1999.

Issued in Fort Worth, Texas, on February 5, 1999.

**Eric Bries,**

*Acting Manager, Rotorcraft Directorate, Aircraft Certification Service.*

[FR Doc. 99-3588 Filed 2-12-99; 8:45 am]

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## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 98-SW-40-AD; Amendment 39-11039; AD 98-19-04]

RIN 2120-AA64

#### **Airworthiness Directives; Agusta S.p.A. Model A109C, A109E, and A109K2 Helicopters**

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

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

**SUMMARY:** This document publishes in the **Federal Register** an amendment adopting Airworthiness Directive (AD) AD 98-19-04, which was sent previously to all known U.S. owners and operators of Agusta S.p.A. Model A109C, A109E, and A109K2 helicopters by individual letters. This AD requires conducting a tapping inspection of the upper and lower side of the main rotor blade (blade) blade tip cap for debonding between the metal shells and honeycomb core; conducting a visual inspection of the upper and lower side of the blade tip cap for swelling or deformation between the metal shells and the honeycomb core; and visually inspecting the welded bead along the leading edge of the blade tip cap for cracks. This amendment is prompted by two discoveries of cracks in the leading edge of the blade tip cap of a blade. The actions specified by this AD are intended to prevent blade tip cap failure and subsequent loss of control of the helicopter.

**DATES:** Effective March 3, 1999, to all persons except those persons to whom it was made immediately effective by Priority Letter AD 98-19-04, issued on August 31, 1998, which contained the requirements of this amendment.

Comments for inclusion in the Rules Docket must be received on or before April 19, 1999.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Office of the Regional Counsel, Southwest Region, Attention: Rules Docket No. 98-SW-40-AD, 2601 Meacham Blvd., Room 663, Fort Worth, Texas 76137.

**FOR FURTHER INFORMATION CONTACT:** Scott Horn, Aerospace Engineer, FAA, Rotorcraft Directorate, Rotorcraft Standards Staff, 2601 Meacham Blvd., Fort Worth, Texas 76137, telephone (817) 222-5125, fax (817) 222-5961.

**SUPPLEMENTARY INFORMATION:** On August 31, 1998, the FAA issued Priority Letter AD 98-19-04 applicable to Agusta S.p.A. Model A109C, A109E, and A109K2 helicopters, which requires conducting a tapping inspection of the upper and lower side of the blade tip cap for debonding between the metal shells and honeycomb core; conducting a visual inspection of the upper and lower side of the blade tip cap for swelling or deformation between the metal shells and the honeycomb core; and visually inspecting the welded bead along the leading edge of the blade tip cap for a crack. That action was prompted by two discoveries of cracks in the leading edge of the blade tip cap of a blade. The cracks were discovered after pilots experienced increased vibration during flight. Subsequent investigation revealed that the increased vibration was caused by debonding of the honeycomb material in the blade, which led to deformation and cracking of the blade tip cap. This condition, if not corrected, could result in blade tip cap failure and subsequent loss of control of the helicopter.

Agusta S.p.A. has issued Agusta Bolletino Tecnico No. 109-106, dated July 21, 1998, Agusta Bolletino Tecnico No. 109EP-1, Revision A, dated September 9, 1998, and Agusta Bolletino Tecnico No. 109K-22, dated July 13, 1998, applicable to Agusta S.p.A. Model A109C, A109E, and A109K2 helicopters, which specify conducting a tapping inspection of the blade tip cap for debonding; conducting a visual inspection of the blade tip cap for swelling or deformation; and visually inspecting the welded bead along the leading edge of the blade tip cap for a crack. The Ente Nazionale di Aviazione Civile (ENAC) classified this service bulletin as mandatory and issued AD 98-271, applicable to Model A109K2 helicopters, dated July 29, 1998; AD 98-275, applicable to Model A109C