

**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]

**BILLING CODE 4910-13-U**

## 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

helicopters and AD 98-276, applicable to Model A109E helicopters, both dated August 4, 1998, and AD 98-319, applicable to Model A109E helicopters dated September 15, 1998, which superseded AD 98-276, in order to assure the continued airworthiness of these helicopters in Italy.

These helicopter models are manufactured in Italy and are type certificated for operation in the United States under the provision of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Pursuant to this bilateral airworthiness agreement, the ENAC has kept the FAA informed of the situation described above. The FAA has examined the findings of the ENAC, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operations in the United States.

Since the unsafe condition described is likely to exist or develop on other Agusta S.p.A. Model A109C, A109E, and A109K2 helicopters of the same type design, the FAA issued Priority Letter AD 98-19-04 to prevent blade tip cap failure and subsequent loss of control of the helicopter. The AD requires, within 10 hours time-in-service (TIS), and thereafter at intervals not to exceed 25 hours TIS, conducting a tapping inspection of the upperside and lowerside of the blade tip cap for debonding between the metal shells and honeycomb core; conducting a visual inspection of the upperside and lowerside 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 using an 8-power or higher magnifying glass. If any crack, swelling, deformation, or debonding that exceeds the limits prescribed in the applicable maintenance manual is discovered, replacement of the blade with an airworthy blade is required. The short compliance time involved is required because the previously described critical unsafe condition can adversely affect the structural integrity of the aircraft. Therefore, the inspections are required within 10 hours TIS, and thereafter at intervals not to exceed 25 hours TIS, and this AD must be issued immediately.

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 August 31, 1998 to all known U.S. owners and operators of Agusta S.p.A. Model A109C, A109E, and A109K2 helicopters. These conditions still exist, and the AD is hereby published in the **Federal Register** as an amendment to section 39.13 of the Federal Aviation Regulations (14 CFR 39.13) to make it effective to all persons. This final rule contains three changes from the priority letter AD. Agusta issued a revision to Bolletino Tecnico No.109EP-1 on September 9, 1998, so references to it in Note 2 have been changed to reflect the revision. The Registro Aeronautico Italiano has become the ENAC, and has issued AD 98-319, dated September 15, 1998, which is applicable to Model A109E helicopters. That AD supersedes AD 98-276. This change is reflected in Note 4. Also, paragraph (a) has been changed to allow the use of a coin to conduct the tap test instead of only a steel hammer as was required in the priority letter AD. 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 21 helicopters of U.S. registry will be affected by this AD, that it will take approximately 4 work hours per helicopter to accomplish the inspection, and the average labor rate is \$60 per work hour. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$5040 for the initial inspection and for each repetitive inspection of the fleet. This estimate is based on the assumption that no main rotor blade will need to be replaced as a result of these inspections.

#### 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, both before and after the closing date for comments, 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 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. 98-SW-40-AD." The postcard will be date stamped and returned to the commenter.

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.

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:

**AD 98-19-04 Agusta S.p.A.:** Amendment 39-11039. Docket No. 98-SW-40-AD.

*Applicability:* Model A109C, A109E, and A109K2 helicopters, with main rotor blades, part number (P/N) 709-0103-01-all dash numbers, having a serial number (S/N) up to and including S/N 1428 with a prefix of

either "EM-" or "A5-", 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 (f) 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

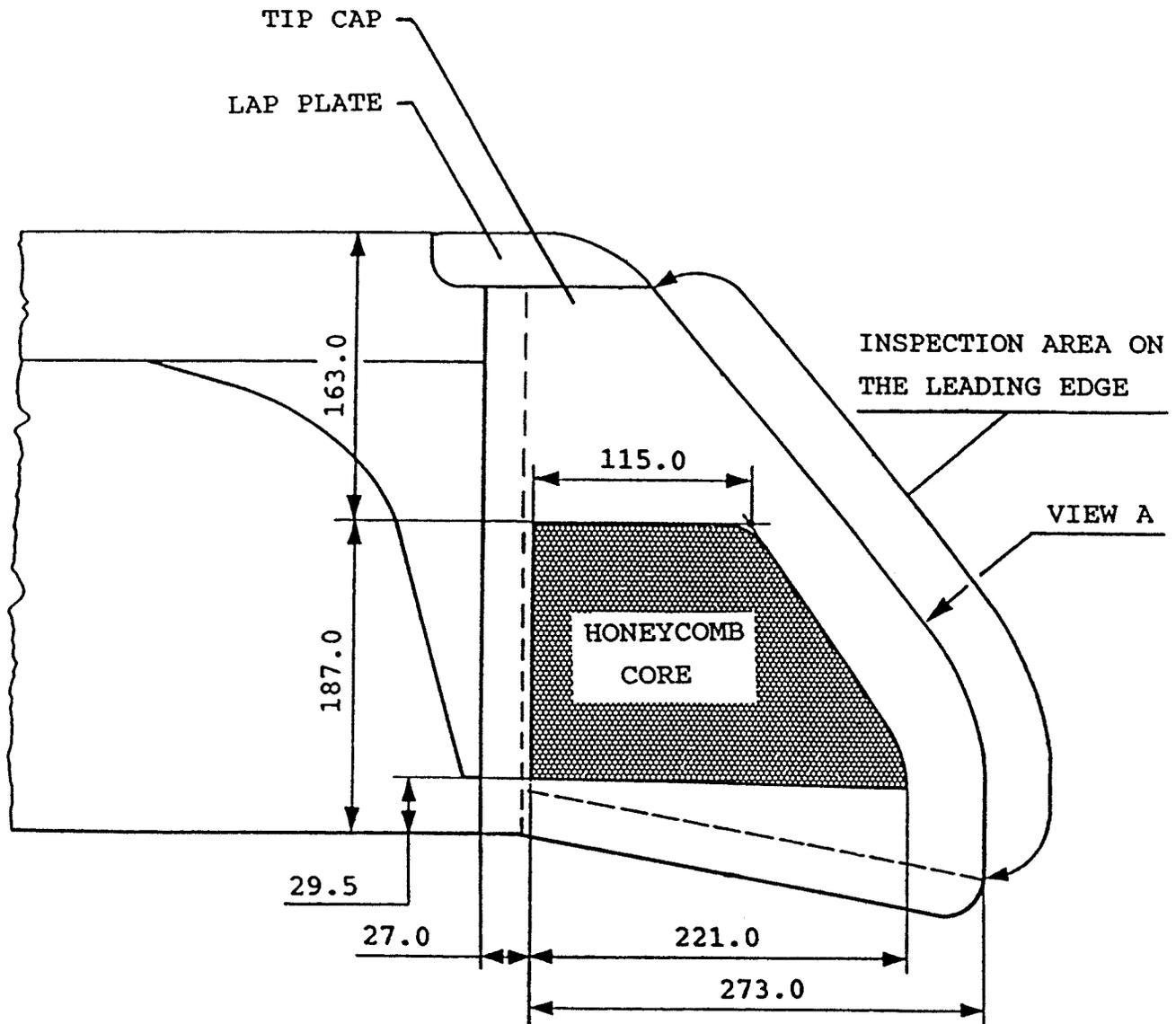
case does the presence of any modification, alteration, or repair remove any helicopter from the applicability of this AD.

*Compliance:* Required within 10 hours time-in-service (TIS), unless accomplished previously, and thereafter at intervals not to exceed 25 hours TIS.

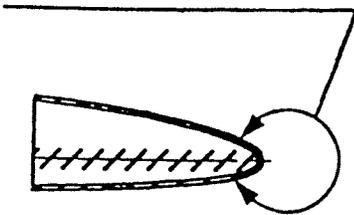
To prevent failure of a main rotor blade (blade) blade tip cap and subsequent loss of control of the helicopter, accomplish the following:

(a) Conduct a tap inspection of the upperside and lowerside of each blade tip cap for debonding between the metal shells and the honeycomb core using a steel hammer, P/N 109-3101-58-1, or a coin (a quarter) in the area indicated as honeycomb core on Figure 1.

**BILLING CODE 4910-13-U**



INSPECTION AREA ON THE LEADING EDGE



VIEW A

DIMENSIONS IN MILLIMETERS

FIGURE 1

(b) Visually inspect the upperside and lowerside of each blade tip cap for swelling or deformation.

(c) Using an 8-power or higher magnifying glass, visually inspect the welded bead along the leading edge of each blade tip cap for cracks in the area shown in Figure 1.

(d) If any swelling, deformation, crack, or debonding that exceeds the prescribed limits in the applicable maintenance manual is found, replace the blade with an airworthy blade.

**Note 2:** 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, which are applicable to Agusta S.p.A. Model A109C, A109E, and A109K2 helicopters, respectively, pertain to the subject of this AD.

(e) Replacement blades affected by this AD must comply with the repetitive inspection requirements of this AD. Replacement of an affected blade with a blade having an airworthy blade tip cap, P/N 709-0103-29-109, is a terminating action for the requirements of this AD for that blade.

(f) 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, Rotorcraft Standards Staff, FAA. Operators shall submit their requests through an FAA Principal Maintenance Inspector, who may concur or comment and then send it to the Manager, Rotorcraft Standards Staff.

**Note 3:** Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Rotorcraft Standards Staff.

(g) 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.

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

**Note 4:** The subject of this AD is addressed in Ente Nazionale di Aviazione Civile (Italy) AD 98-271, applicable to Model A109K2 helicopters, dated July 29, 1998; AD 98-275, applicable to Model A109C helicopters and AD 98-276, applicable to Model A109E helicopters, both dated August 4, 1998, and AD 98-319 (which superseded AD 98-276), applicable to Model A109E helicopters, dated September 15, 1998.

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

**Eric Bries,**

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

[FR Doc. 99-3589 Filed 2-12-99; 8:45 am]

BILLING CODE 4910-13-U

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. 97-SW-61-AD; Amendment 39-11036; AD 99-04-12]

RIN 2120-AA64

**Airworthiness Directives; McDonnell Douglas Helicopter Systems Model 369D, 369E, 369FF, 369H, MD500N, and MD600N Helicopters**

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

**ACTION:** Final rule.

**SUMMARY:** This amendment adopts a new airworthiness directive (AD), applicable to McDonnell Douglas Helicopter Systems (MDHS) Model 369D, 369E, 369FF, 369H, MD500N, and MD600N helicopters, that requires a one-time visual inspection of certain input shaft coupling assemblies for pitting. This amendment is prompted by three operators' reports of discovering pitting on the internal spline teeth. The actions specified by this AD are intended to prevent failure of the spline teeth in the input shaft coupling assembly, loss of drive to the main rotor system, and subsequent loss of control of the helicopter.

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

**FOR FURTHER INFORMATION CONTACT:** Bruce Conze, Aerospace Engineer, Los Angeles Aircraft Certification Office, 3960 Paramount Blvd., Lakewood, California, 90712, telephone (562) 627-5261, fax (562) 627-5210.

**SUPPLEMENTARY INFORMATION:** A proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an airworthiness directive (AD) that is applicable to MDHS Model 369D, 369E, 369FF, 369H, MD500N, and MD600N helicopters was published in the **Federal Register** on May 15, 1998 (63 FR 27011). That action proposed to require a one-time visual inspection of certain input shaft coupling assemblies for pitting.

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 addition of a calendar period to supplement the time-in-service compliance time is necessary to account for the effects of corrosion which caused the internal spline pitting. The FAA does not concur for the following reasons:

- The original corrosion occurred during the manufacturing process due to

exposure of unprotected machined parts and porosity in the material. The corrosion was subsequently removed in normal processing and parts coated with dry lube. The corrosion is not a result of time-in-service.

- After examining parts returned from the field, there is no evidence suggesting that the original corrosion damage increases with time.

The same commenter also states that there are no guidelines or references to Boeing instructions, service bulletins, or manuals given to strip the input shaft coupling assembly and perform the visual inspection. The FAA does not concur; Note 2 states that Boeing Service Bulletin SB369H-240, SB369E-085, SB500N-013, SB369D-192, SB369F-072, SB600N-003, dated September 26, 1997, pertains to the subject of the AD. No additional guidelines for stripping shaft coupling assembly and performing the visual inspection are deemed necessary because the corrosion on the input shaft coupling assemblies is obvious and easily discernible with the naked eye without stripping the shaft coupling assembly.

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 as proposed.

The FAA estimates that 82 helicopters of U.S. registry will be affected by this AD, that it will take approximately 3 work hours per helicopter to accomplish the required actions, and that the average labor rate is \$60 per work hour. Required parts will cost approximately \$638 per coupling assembly. Based on these figures, the total cost impact of the AD on U.S. operators is estimated to be \$67,076 if the coupling assembly is replaced in all 82 helicopters.

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