

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

[Docket No. FAA-2009-0953; Directorate Identifier 2009-SW-45-AD]

RIN 2120-AA64

**Airworthiness Directives; MD Helicopters, Inc. Model MD-900 Helicopters**

AGENCY: Federal Aviation Administration, DOT.

ACTION: Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes superseding an existing airworthiness directive (AD) for MD Helicopters, Inc. (MDHI) Model MD-900 helicopters. That AD currently requires applying serial numbers to certain parts, increasing the life limit for various parts, maintaining a previously established life limit for a certain vertical stabilizer control system (VSCS) bellcrank assembly and bellcrank arm, and correcting the part number for the VSCS bellcrank arm. This proposal would require the same actions, except it would reduce the life limit of the swashplate spherical slider bearing (slider bearing). It would further correct what was described as a "bellcrank arm" life limit in the current AD and correctly describe it as another "bellcrank assembly" life limit. This proposal is prompted by two reports of cracks in the slider bearing that occurred well before the previously increased retirement life of 2,030 hours time-in-service (TIS) was reached. The actions specified by the proposed AD are intended to establish appropriate life limits for various parts, and to prevent fatigue failure of those parts and subsequent loss of control of the helicopter.

**DATES:** Comments must be received on or before December 21, 2009.

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

- *Federal eRulemaking Portal:* Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- *Fax:* 202-493-2251.
- *Mail:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE., Washington, DC 20590.
- *Hand Delivery:* U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue, SE.,

Washington, DC 20590, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You may get the service information identified in this AD from MD Helicopters Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, Arizona 85215-9734, telephone 1-800-388-3378, fax 480-346-6813, or on the web at [www.mdhelicopters.com](http://www.mdhelicopters.com).

You may examine the comments to this proposed AD in the AD docket on the Internet at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Roger Durbin, Aviation Safety Engineer, FAA, Los Angeles Aircraft Certification Office, Airframe Branch, 3960 Paramount Blvd., Lakewood, California 90712, telephone (562) 627-5233, fax (562) 627-5210.

**SUPPLEMENTARY INFORMATION:****Comments Invited**

We invite you to submit any written data, views, or arguments regarding this proposed AD. Send your comments to the address listed under the caption **ADDRESSES**. Include the docket number "FAA-2009-0953, Directorate Identifier 2009-SW-45-AD" at the beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the proposed AD. We will consider all comments received by the closing date and may amend the proposed AD in light of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this proposed rulemaking. Using the search function of our docket web site, you can find and read the comments to any of our dockets, including the name of the individual who sent or signed the comment. You may review the DOT's complete Privacy Act Statement in the **Federal Register** published on April 11, 2000 (65 FR 19477-78).

**Examining the Docket**

You may examine the docket that contains the proposed AD, any comments, and other information in person at the Docket Operations office between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The Docket Operations office (telephone (800) 647-5527) is located in Room W12-140 on the ground floor of the West Building at the street address

stated in the **ADDRESSES** section. Comments will be available in the AD docket shortly after receipt.

**Discussion**

On June 17, 1997, we issued AD 97-13-09, Amendment 39-10056 (62 FR 34163, June 25, 1997), to require applying a specified serial number (S/N) to the following parts: for helicopters with S/N 0002 through 0012, to the mid-forward truss assembly, P/N 900F2401200-102, and to the forward and aft deck fitting assemblies, P/N 900F2401500-103 and 900F2401600-103, respectively; for helicopters with S/N 0002 through 0048, to the VSCS bellcrank assemblies, P/N 900F2341712-101 and P/N 900FP341712-103, and to the mid-aft truss strut assembly, P/N 900F2401300-103. That AD also reduced the life limits for the nonrotating swashplate assembly, P/N 900C2010192-105, -107, -109, and -111, from 8,300 hours TIS to 554 hours TIS; the collective drive link assembly, P/N 900C2010207-101, from 3,900 hours TIS to 1,480 hours TIS; and the slider bearing, P/N 900C3010042-103, from 2,100 hours TIS to 480 hours TIS. Finally, that AD established life limits for the bellcrank assembly, P/N 900FP341712-103, and the bellcrank arm, P/N 900F2341713-101 (used in the bellcrank assembly, P/N 900F2341712-101), of 2,700 hours TIS. That AD was prompted by an analysis that indicated a need to reduce the life limits on several parts and by the addition of non-serialized parts to the life-limited parts list. The requirements of that AD were intended to establish new life limits for various parts and reduce the existing life limits on other parts.

On July 28, 1999, we issued superseding AD 99-16-13, Amendment 39-11248 (64 FR 42824, August 6, 1999), to correct the P/N for the bellcrank arm from P/N 900F2341713-101 to P/N 900F2341712-101, and to increase the life limits for the nonrotating swashplate, P/N 900C2010192-105, -107, -109, or -111, from 554 hours TIS to 1,800 hours TIS; the collective drive link assembly, P/N 900C2010207-101, from 1,480 hours TIS to 3,307 hours TIS; and the slider bearing, P/N 900C3010042-103, from 480 hours TIS to 2,030 hours TIS, and maintaining the 2,700 hours TIS for the bellcrank assembly and bellcrank arm. AD 99-16-13 was prompted by both the need to correct a P/N as well as additional analyses (modified fatigue spectrums, fatigue tests, and flight strain data) supporting an increase in the life limits for certain parts. The requirements of that AD are intended to

increase the life limits of various parts, correct the bellcrank arm P/N, and specify applying serial numbers to various parts.

Since issuing AD 99-16-13, we have received two reports from the manufacturer of cracks in the attachment ear of the slider bearing, P/N 900C3010042-103. A review of the service history and a further review of the design data for the slider bearing now indicate that a reduced life limit is required to maintain continued operational safety. The manufacturer has made available an alternate replacement slider bearing, P/N 900C3010042-105, that has improved durability characteristics and an increased life limit of 12,807 hours TIS. Further, we have determined that even though we corrected P/N "900F2341713-101" to read "900F2341712-101" in AD 99-16-13, we incorrectly described the part as a "bellcrank arm" in both AD 99-16-13 and AD 97-13-09. The correct nomenclature for P/N 900F2341712-101 is "bellcrank assembly." We propose to correct that error in this action.

We have reviewed MD Helicopters Service Bulletin SB900-096, dated February 28, 2005, which contains a reduction of the life limit of the slider bearing from 2,030 hours TIS to 700 hours TIS.

This previously described unsafe condition is likely to exist or develop on other helicopters of the same type design. Therefore, the proposed AD would supersede AD 99-16-13 to decrease the life limit of the slider bearing from 2,030 hours TIS to 700 hours TIS. Additionally, this AD changes the nomenclature for P/N 900F2341712-101 from bellcrank arm to bellcrank assembly. The proposed AD would also retain the requirements of the existing AD to apply serial numbers to various parts, and retain the life limits of various other parts.

We estimate that this proposed AD would affect 27 helicopters of U.S. registry and that it would take approximately 2.5 work hours per helicopter to accomplish the serialization of the affected parts at an average rate of \$80 per work hour. Additionally, it is estimated that 8 of those aircraft will require replacement of the slider bearing, which will require approximately 7 work hours to accomplish at an average rate of \$80 per work hour. Required parts would cost \$11,080 per helicopter for the slider bearing. Based on these figures, we estimate the total cost impact of the proposed AD on U.S. operators to be \$98,520.

### Regulatory Findings

We have determined that this proposed AD would not have federalism implications under Executive Order 13132. Additionally, this proposed AD would 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.

For the reasons discussed above, I certify that the proposed regulation:

1. Is not a "significant regulatory action" under Executive Order 12866;
2. Is not a "significant rule" under the 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.

We prepared a draft economic evaluation of the estimated costs to comply with this proposed AD. See the AD docket to examine the draft economic evaluation.

### Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII, Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in subtitle VII, part A, subpart III, section 44701, "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

### List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Safety.

### The Proposed Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration proposes to amend 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 removing Amendment 39-11248 (64 FR 42824, August 6, 1999), and by adding a new airworthiness directive (AD), to read as follows:

#### MD Helicopters, Inc. Model MD-900

**Helicopters:** Docket No. FAA-2009-0953; Directorate Identifier 2009-SW-45-AD. Supersedes AD 99-16-13, Amendment 39-11248, Docket No. 98-SW-42-AD.

#### Applicability

MD-900 helicopters, certificated in any category.

#### Compliance

Required as indicated, unless accomplished previously.

To establish appropriate life limits for various parts, and to prevent fatigue failure of those parts and subsequent loss of control of the helicopter, accomplish the following:

- (a) Remove from service as follows:
  - (1) The nonrotating swashplate assembly, part number (P/N) 900C2010192-105, -107, -109, or -111, on or before 1,800 hours time-in-service (TIS).
  - (2) The collective drive link assembly, P/N 900C2010207-101, on or before 3,307 hours TIS.
  - (3) The swashplate spherical slider bearing, P/N 900C3010042-103, on or before 700 hours TIS.
  - (4) The vertical stabilizer control system (VSCS) bellcrank assembly, P/N 900FP341712-103, and bellcrank assembly, P/N 900F2341712-101, on or before 2,700 hours TIS.

(b) Within 100 hours TIS:

- (1) For Model MD-900 helicopters with serial numbers (S/N) 900-00002 through 900-00012, apply the appropriate S/N to the mid-forward truss assembly, P/N 900F2401200-102, and the forward and aft deck-fitting assemblies, P/N 900F2401500-103 and P/N 900F2401600-103.
- (2) For Model MD-900 helicopters with S/N 900-00002 through 900-00048, apply S/N to the left and right VSCS bellcrank assemblies, P/N 900F2341712-101 and P/N 900FP341712-103, and the mid-aft truss strut assembly, P/N 900F2401300-103.

(3) Apply the S/N, as specified in paragraphs (b)(1) and (b)(2) of this AD, adjacent to the existing P/N, as listed in Appendix A of this AD, using permanent ink or paint. When dry, apply a clear coat over the S/N.

(c) This AD revises the Airworthiness Limitations Section of the MD-900 Maintenance Manual by increasing the life limits for certain parts and reducing the life limit of the slider bearing.

**Note:** The Airworthiness Limitations Section of the MD-900 Rotorcraft Maintenance Manual, Reissue 1, Revision 25,

dated April 16, 2006, and MD Helicopters Service Bulletin SB900-096, dated February 28, 2005, pertain to the subject of this AD. 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, Los Angeles Aircraft Certification Office, FAA, for information

about previously approved alternative methods of compliance.

BILLING CODE 4910-13-P

**Appendix A**  
**VSCS Bellcrank, Mid-Aft Strut and Deck Fitting Serialization**

Serial Number To Be Applied			
Aircraft Ser. No.	VSCS Bellcrank Assembly 900F2341712-101 and 900FP341712-103		Strut Assy, Mid-Aft 900F2401300-103
	LH VSCS	RH VSCS	
0002	009999-0001	009999-0002	Previously serialized
0008	009999-0003	009999-0004	Previously serialized
0010	009999-0005	009999-0006	Previously serialized
0011	009999-0007	009999-0008	Previously serialized
0012	009999-0009	009999-0010	Previously serialized
0013	009999-0011	009999-0012	009999-0006
0014	009999-0013	009999-0014	009999-0007
0015	009999-0015	009999-0016	009999-0008
0016	009999-0017	009999-0018	009999-0009
0017	009999-0019	009999-0020	009999-0010
0018	009999-0021	009999-0022	009999-0011
0019	009999-0023	009999-0024	009999-0012
0020	009999-0025	009999-0026	009999-0013
0021	009999-0027	009999-0028	009999-0014
0022	009999-0029	009999-0030	009999-0015
0023	009999-0031	009999-0032	009999-0016
0024	009999-0033	009999-0034	009999-0017
0025	009999-0035	009999-0036	009999-0018
0026	009999-0037	009999-0038	009999-0019
0027	009999-0039	009999-0040	009999-0020
0028	009999-0041	009999-0042	009999-0021
0029	009999-0043	009999-0044	009999-0022
0030	009999-0045	009999-0046	009999-0023

## Appendix A (continued)

Serial Number To Be Applied (Cont.)			
Aircraft Ser. No.	VSCS Bellcrank Assembly 900F2341712-101 and 900FP341712-103		Strut Assy, Mid-Aft 900F2401300-103
	LH VSCS	RH VSCS	
0031	009999-0047	009999-0048	009999-0024
0032	009999-0049	009999-0050	009999-0025
0033	009999-0051	009999-0052	009999-0026
0034	009999-0053	009999-0054	009999-0027
0035	009999-0055	009999-0056	009999-0028
0036	009999-0057	009999-0058	009999-0029
0037	009999-0059	009999-0060	009999-0030
0038	009999-0061	009999-0062	009999-0031
0039	009999-0063	009999-0064	009999-0032
0040	009999-0065	009999-0066	009999-0033
0041	009999-0067	009999-0068	009999-0034
0042	009999-0069	009999-0070	009999-0035
0043	009999-0071	009999-0072	009999-0036
0044	009999-0073	009999-0074	009999-0037
0045	009999-0075	009999-0076	009999-0038
0046	009999-0077	009999-0078	009999-0039
0047	009999-0079	009999-0080	009999-0040
0048	009999-0081	009999-0082	009999-0041

**NOTE** - Aircraft 00002 thru 00012 are equipped with 900F2401300-101 Mid-Aft Strut Assemblies. These strut assemblies were previously serialized, therefore, no action is required. Refer to CSP-900RMM-2, Section 04-00-00, for retirement time of this part.

Serial Number To Be Applied			
Aircraft Serial No.	Strut Assembly, Mid-Fwd Truss (900F2401200-102)	Deck Fitting Assembly, Fwd (900F2401500-103)	Deck Fitting Assembly, Aft (900F2401600-103)
0002	009999-0001	009999-0001	009999-0001
0008	009999-0002	009999-0002	009999-0002
0010	009999-0003	009999-0003	009999-0003
0011	009999-0004	009999-0004	009999-0004
0012	009999-0005	009999-0005	009999-0005

Issued in Fort Worth, Texas, on October 8, 2009.

Larry M. Kelly,

Acting Manager, Rotorcraft Directorate,  
Aircraft Certification Service.

[FR Doc. E9-25439 Filed 10-21-09; 8:45 am]

BILLING CODE 4910-13-C

**DEPARTMENT OF TRANSPORTATION**  
**Federal Aviation Administration**

**14 CFR Part 39**

[Docket No. FAA-2009-0987; Directorate Identifier 2009-CE-054-AD]

RIN 2120-AA64

**Airworthiness Directives; AeroSpace Technologies of Australia Pty Ltd Models N22B, N22S, and N24A Airplanes**

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

**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** We propose to adopt a new airworthiness directive (AD) for the products listed above that would supersede an existing AD. This proposed AD results from mandatory continuing airworthiness information (MCAI) originated by an aviation authority of another country to identify and correct an unsafe condition on an aviation product. The MCAI describes the unsafe condition as:

Late in 2002 the manufacturer advised CASA of another Nomad accident which was possibly caused by aileron flutter with the