

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

[Docket No. 2001-NM-173-AD]

RIN 2120-AA64

**Airworthiness Directives; McDonnell Douglas Model MD-90-30 Airplanes****AGENCY:** Federal Aviation Administration, DOT.**ACTION:** Notice of proposed rulemaking (NPRM).

**SUMMARY:** This document proposes the adoption of a new airworthiness directive (AD) that is applicable to certain McDonnell Douglas Model MD-90-30 airplanes. This proposal would require a one-time inspection for chafing of the RDB wire bundle against the automatic direction finder (ADF) receiver located at the aft end of the forward right radio rack; repair or replacement, if necessary; and modification of the wire bundle. This action is necessary to prevent chafing of the RDB wire bundle against the ADF receiver, which could result in electrical arcing and consequent smoke and/or fire in the cockpit. This action is intended to address the identified unsafe condition.

**DATES:** Comments must be received by November 7, 2002.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-173-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: [9-anm-nprmcomment@faa.gov](mailto:9-anm-nprmcomment@faa.gov). Comments sent via fax or the Internet must contain "Docket No. 2001-NM-173-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in the proposed rule may be obtained from Boeing Commercial Aircraft Group, Long Beach Division, 3855 Lakewood Boulevard, Long Beach, California 90846, Attention: Data and Service Management, Dept. C1-L5A (D800-0024). This information may be examined at the FAA, Transport

Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California.

**FOR FURTHER INFORMATION CONTACT:**

**Technical Information:** George Mabuni, Aerospace Engineer, Systems and Equipment Branch, ANM-130L, FAA, Los Angeles Aircraft Certification Office, 3960 Paramount Boulevard, Lakewood, California 90712-4137; telephone (562) 627-5341; fax (562) 627-5210.

**Other Information:** Sandi Carli, Airworthiness Directive Technical Editor/Writer; telephone (425) 687-4243, fax (425) 227-1232. Questions or comments may also be sent via the Internet using the following address: [sandi.carli@faa.gov](mailto:sandi.carli@faa.gov). Questions or comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

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

Interested persons are invited to participate in the making of the proposed rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the proposed AD is being requested.
- Include justification (*e.g.*, reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed 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 summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments

submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-173-AD." The postcard will be date stamped and returned to the commenter.

**Availability of NPRMs**

Any person may obtain a copy of this NPRM by submitting a request to the FAA, Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-173-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056.

**Discussion**

The FAA has received a report indicating chafing of an RDB wire bundle against the automatic direction finder (ADF) receiver located at the aft end of the forward right radio rack, due to inadequate clearance. The chafing was found on a McDonnell Douglas MD-90-30 airplane. Investigation revealed that this condition may exist on airplanes with a No. 2 ADF receiver installed adjacent to a large diameter wire bundle. The manufacturer has determined that splitting the wire bundle into two smaller bundles will minimize potential chafing. Chafing of the RDB wire bundle against the ADF receiver, if not found and fixed, could result in electrical arcing and consequent smoke and/or fire in the cockpit.

**Explanation of Relevant Service Information**

We have reviewed and approved McDonnell Douglas Alert Service Bulletin MD90-24A051, Revision 02, dated August 14, 2002, which describes procedures for a visual inspection to find chafing of the RDB wire bundle against the automatic direction finder (ADF) receiver located at the aft end of the forward right radio rack of the airplane at approximately station Y=160.000, and repair or replacement if necessary. The service bulletin also provides instructions for modification of the wire bundle by installation of three new tie mounts using new screws and clip nuts, removal of the existing tie straps and splitting the wire bundle into two separate bundles, installation of six new straps, and verification of adequate clearance between the wire bundle and the ADF receiver. Following the modification, the service bulletin specifies a return-to-service test on the ADF receiver. The service bulletin also specifies reporting inspection findings (chafing or no chafing) to the manufacturer.

The service bulletin references McDonnell Douglas Wire Diagram

Manual for repair or replacement of the wire bundles, and McDonnell Douglas Airplane Maintenance Manual for the return-to-service test.

### Explanation of Requirements of Proposed Rule

Since an unsafe condition has been identified that is likely to exist or develop on other products of this same type design, the proposed AD would require accomplishment of the actions specified in the service bulletin described previously, except as discussed below.

### Differences Between Service Information and This Proposed Rule

The service bulletin refers only to a "visual inspection" to find chafing of the RDB wire bundle, but this proposed AD would require a "general visual inspection." Note 2 has been included in this proposed AD to define this type of inspection.

Although the service bulletin requests that operators report inspection findings of chafing or no chafing to the manufacturer after inspecting the RDB wire bundle, this proposed AD does not contain such a reporting requirement.

### Cost Impact

There are approximately 96 airplanes of the affected design in the worldwide fleet. The FAA estimates that 21 airplanes of U.S. registry would be affected by this proposed AD.

It would take approximately 1 work hour per airplane to accomplish the proposed inspection, at an average labor rate of \$60 per work hour. Based on these figures, the cost impact of the inspection proposed by AD on U.S. operators is estimated to be \$1,260, or \$60 per airplane.

It would take approximately 4 work hours per airplane to accomplish the proposed modification of the RDB wire bundle, at an average labor rate of \$60 per work hour. Parts cost would be minimal. Based on these figures, the cost impact of the modification proposed by this AD on U.S. operators is estimated to be \$5,040, or \$240 per airplane.

Should an operator be required to accomplish the repair or replacement of the wire bundle, it would take approximately 2 work hours per airplane to accomplish the proposed actions, at an average labor rate of \$60 per work hour. Parts cost would be minimal. Based on these figures, the cost impact of the repair or replacement proposed by this AD would be \$120 per airplane.

The cost impact figures discussed above are based on assumptions that no

operator has yet accomplished any of the proposed requirements of this AD action, and that no operator would accomplish those actions in the future if this proposed AD were not adopted. The cost impact figures discussed in AD rulemaking actions represent only the time necessary to perform the specific actions actually required by the AD. These figures typically do not include incidental costs, such as the time required to gain access and close up, planning time, or time necessitated by other administrative actions.

### Regulatory Impact

The regulations proposed herein 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. Therefore, it is determined that this proposal would not have federalism implications under Executive Order 13132.

For the reasons discussed above, I certify that this 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) if promulgated, 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 copy of the draft regulatory evaluation prepared for this action is contained in the Rules Docket. A copy of it may be obtained by contacting 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.

### 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 adding the following new airworthiness directive:

**McDonnell Douglas:** Docket 2001–NM–173–AD.

*Applicability:* Model MD–90–30 airplanes, as listed in McDonnell Douglas Alert Service Bulletin MD90–24A051, Revision 02, dated August 14, 2002; certificated in any category.

**Note 1:** This AD applies to each airplane 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 airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

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

To prevent chafing of the RDB wire bundle against the automatic direction finder (ADF) receiver, which could result in electrical arcing and consequent smoke and/or fire in the cockpit, accomplish the following:

### Inspection/Repair or Replacement/Modification

(a) Within 6 months after the effective date of this AD, do the requirements specified in paragraphs (a)(1) and (a)(2) of this AD, per McDonnell Douglas Alert Service Bulletin MD90–24A051, Revision 02, dated August 14, 2002.

(1) Do a one-time general visual inspection for chafing of the RDB wire bundle against the ADF receiver located at the aft end of the forward right radio rack. If any chafing is found, before further flight, repair or replace the affected wire bundle.

**Note 2:** For the purposes of this AD, a general visual inspection is defined as: "A visual examination of an interior or exterior area, installation, or assembly to detect obvious damage, failure, or irregularity. This level of inspection is made from within touching distance unless otherwise specified. A mirror may be necessary to enhance visual access to all exposed surfaces in the inspection area. This level of inspection is made under normally available lighting conditions such as daylight, hangar lighting, flashlight, or droplight and may require removal or opening of access panels or doors. Stands, ladders, or platforms may be required to gain proximity to the area being checked."

(2) Modify the RDB wire bundle (including installation of three new tie mounts using new screws and clip nuts, removal of the existing tie straps and splitting the wire bundle into two separate bundles, installation of six new straps, and verification of adequate clearance between the wire bundle and the ADF receiver), and do the return-to-service test.

(b) Accomplishment of the actions specified in paragraphs (a)(1) and (a)(2) of this AD, per McDonnell Douglas Alert Service Bulletin MD90–24A051, dated October 28, 1999; or Revision 01 dated March

26, 2001, before the effective date of this AD, is considered acceptable for compliance with the requirements of this AD.

#### Alternative Methods of Compliance

(c) 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, Los Angeles Aircraft Certification Office (ACO), FAA. Operators shall submit their 1 requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Los Angeles ACO.

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

#### Special Flight Permit

(d) 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 airplane to a location where the requirements of this AD can be accomplished.

Issued in Renton, Washington, on September 12, 2002.

**Vi L. Lipski,**

*Manager, Transport Airplane Directorate, Aircraft Certification Service.*

[FR Doc. 02-24019 Filed 9-20-02; 8:45 am]

BILLING CODE 4910-13-P

## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. 2000-NE-45-AD]

RIN 2120-AA64

#### Airworthiness Directives; Hartzell Propeller Inc., Model HD-E6C-3B/E13890K Propellers

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

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

**SUMMARY:** The Federal Aviation Administration (FAA) proposes to adopt a new airworthiness directive (AD) that is applicable to Hartzell Propeller Inc. HD-E6C-3B/E13890K propellers. This proposal would require the reduction of the original hub certified service (fatigue) life from unlimited hours to 37,400 flight hours. This proposal is prompted by a reevaluation by Hartzell Propeller Inc. of the D-5108-( ) original hub service life certification calculations. The actions specified by the proposed AD are intended to prevent fatigue failure of D-5108-( ) hubs, which may result in loss of airplane control.

**DATES:** Comments must be received by November 22, 2002.

**ADDRESSES:** Submit comments in triplicate to the Federal Aviation Administration (FAA), New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-NE-45-AD, 12 New England Executive Park, Burlington, MA 01803-5299. This information may be examined, by appointment, at the FAA, New England Region, Office of the Regional Counsel, 12 New England Executive Park, Burlington, MA. Comments may also be sent via the Internet using the following address: [9-ane-adcomment@faa.gov](mailto:9-ane-adcomment@faa.gov). Comments sent via the Internet must contain the docket number in the subject line.

#### FOR FURTHER INFORMATION CONTACT:

Tomaso DiPaolo, Aerospace Engineer, Chicago Aircraft Certification Office, FAA, Small Airplane Directorate, 2300 East Devon Avenue, Des Plaines, IL 60018, telephone; (847) 294-7031, fax; 847 294-7834.

#### SUPPLEMENTARY INFORMATION:

##### Comments Invited

Interested persons are invited to participate in the making of the proposed 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 above. All communications received on or before the closing date for comments, specified above, will be considered before taking action on the proposed rule. The proposals contained in this action may be changed in light of the comments received.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the proposed 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 summarizing each FAA-public contact concerned with the substance of this proposal will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this action must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2000-NE-45-AD." The postcard will be date stamped and returned to the commenter.

#### Availability of NPRM's

Any person may obtain a copy of this NPRM by submitting a request to the FAA, New England Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-NE-45-AD, 12 New England Executive Park, Burlington, MA 01803-5299.

#### Discussion

As a result of an in-service occurrence of a cracked hub, Hartzell

Propeller Inc. has reevaluated the service (fatigue) life of the D-5108-( ) hub installed in the HD-E6C-3B/E13890K propeller. Hartzell has reduced the original hub certified service (fatigue) life from unlimited hours to 37,400 flight hours. Exceeding this life limit could result in fatigue failure of the hub, which may result in loss of airplane control. The 37,400 flight hour life limit is documented in the Airworthiness Limitations section of Hartzell Manual 161.

#### Determination of an Unsafe Condition

Since an unsafe condition has been identified that is likely to exist or develop on other Hartzell Propeller Inc. HD-E6C-3B/E13890K propellers of the same type design, the proposed AD would require the reduction of D-5108-( ) hub certified service (fatigue) life from unlimited hours, to 37,400 flight hours.

#### Economic Analysis

There are approximately 250 propellers of the affected design in the worldwide fleet. The FAA estimates that 140 propellers installed on aircraft of U.S. registry would be affected by this proposed AD, that it would take approximately 30 work hours per propeller to do the proposed actions, and that the average labor rate is \$60 per work hour. The approximate cost of a new hub is \$20,000. Based on these figures, the total cost of the proposed AD on U.S. operators is estimated to be \$3,052,000.

#### Regulatory Analysis

This proposed rule does not have federalism implications, as defined in Executive Order 13132, because it 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. Accordingly, the FAA has not consulted with state authorities prior to publication of this proposed rule.

For the reasons discussed above, I certify that this proposed regulation (1) is not a "significant regulatory action"