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

**[Docket No. FAA-2004-18958; Directorate Identifier 2004-NE-32-AD; Amendment 39-13778; AD 2004-18-01]**

**RIN 2120-AA64**

**Airworthiness Directives; Hoffmann Propeller GmbH & Co KG Models HO-V343 and HO-V343K Propellers**

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

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

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for Hoffmann Propeller GmbH & Co KG (Hoffmann Propeller) models HO-V343 and HO-V343K propellers. This AD requires initial and repetitive visual inspections of propeller blades for blade shake and blade nut preload. This AD also requires initial and repetitive eddy current inspections of blade hubs for damage and cracks. This AD results from a report of a blade separating from either a model HO-V343 or HO-V343K propeller. We are issuing this AD to prevent propeller hub failure and blade separation due to an unknown root cause, leading to damage and possible loss of control of the airplane.

**DATES:** Effective [Insert date 15 days after date of publication in the FEDERAL REGISTER]. The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of [Insert date 15 days after date of publication in the FEDERAL REGISTER].

We must receive any comments on this AD by [Insert date 60 days after date of publication in the FEDERAL REGISTER].

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

- DOT Docket web site: Go to <http://dms.dot.gov> and follow the instructions for sending your comments electronically.
- Government-wide rulemaking web site: Go to <http://www.regulations.gov> and follow the instructions for sending your comments electronically.
- Mail: Docket Management Facility; US Department of Transportation, 400 Seventh Street, S.W., Nassif Building, Room PL-401, Washington, DC 20590-001.
- Fax: (202) 493-2251.
- Hand Delivery: Room PL-401 on the plaza level of the Nassif Building, 400 Seventh Street, S.W., Washington, DC, between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

You can get the service information identified in this AD from Hoffmann Propeller GmbH & Co KG, K pferlingstra e 9, D-83022 Rosenheim, Germany, telephone ++49-(0)8031-1878-0; fax ++49-(0)8031-1878-78.

You may examine the comments on this AD in the AD docket on the Internet at <http://dms.dot.gov>.

**FOR FURTHER INFORMATION CONTACT:** Frank Walsh, Aerospace Engineer, Boston Aircraft Certification Office, FAA, Engine & Propeller Directorate, 12 New

England Executive Park, Burlington, MA 01803-5299; telephone (781) 238-7158; fax (781) 238-7199.

**SUPPLEMENTARY INFORMATION:** The Luftfahrt-Bundesamt (LBA), which is the aviation authority for Germany, recently notified us that an unsafe condition may exist on Hoffmann propeller models HO-V343 and HO-V343K propellers. The LBA has notified us of an occurrence of a propeller blade separating from the hub. Initial investigation after that blade separation revealed that the propeller hub was cracked. The root cause of the failure is not known and is still under investigation. A propeller blade having blade shake may be evidence of either incorrect blade nut preload or a cracked hub or both. Incorrect blade nut preload may be evidence of a cracked hub. The actions specified in this AD are of precautionary nature. We certificated these propellers for use in the U.S. in 1997. We estimate that 12 of these propellers of the same type design are installed on airplanes of U.S. registry.

**Relevant Service Information**

We have reviewed and approved the technical contents of Hoffmann Propeller GmbH & Co KG Service Instruction No. 61-10-05 SI E 4B, dated July 13, 2004, that describes procedures for initial and repetitive visual inspections of propeller blades for blade shake and blade nut preload. This service instruction also describes procedures for initial and repetitive eddy current inspections of blade hubs for damage or cracks. The LBA classified this service instruction as mandatory and issued AD D-2004-352R2, dated July 23, 2004, in order to ensure the airworthiness of these propellers in Germany.

## **Bilateral Airworthiness Agreement**

These Hoffmann Propeller GmbH & Co KG models HO-V343 and HO-V343K propellers are manufactured in Germany and are type certificated for operation in the United States under the provisions of section 21.29 of the Federal Aviation Regulations (14 CFR 21.29) and the applicable bilateral airworthiness agreement. Under this bilateral airworthiness agreement, the LBA kept the FAA informed of the situation described above. We have examined the findings of the LBA, reviewed all available information, and determined that AD action is necessary for products of this type design that are certificated for operation in the United States.

## **FAA's Determination and Requirements of this AD**

The unsafe condition described previously is likely to exist or develop on other Hoffmann Propeller GmbH & Co KG model HO-V343 and HO-V343K propellers of the same type design. We are issuing this AD to prevent propeller hub failure and blade separation due to an unknown root cause, leading to damage and possible loss of control of the airplane. This AD requires initial and repetitive visual inspections of propeller blades for blade shake and blade nut preload. This AD also requires initial and repetitive eddy current inspections of blade hubs for damage and cracks. You must use the service information described previously to perform the actions required by this AD.

## **FAA's Determination of the Effective Date**

Since an unsafe condition exists that requires the immediate adoption of this AD, we have found that notice and opportunity for public comment before issuing this AD are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

**Interim Action**

These actions are interim actions and we may take further rulemaking actions in the future.

**Docket Management System (DMS)**

We have implemented new procedures for maintaining AD docket electronically. As of May 17, 2004, we post new AD actions on the DMS and assign a DMS docket number. We track each action and assign a corresponding Directorate identifier. The DMS docket No. is in the form "Docket No. FAA-200X-XXXXX." Each DMS docket also lists the Directorate identifier ("Old Docket Number") as a cross-reference for searching purposes.

**Comments Invited**

This AD is a final rule that involves requirements affecting flight safety and was not preceded by notice and an opportunity for public comment; however, we invite you to submit any written relevant data, views, or arguments regarding this AD. Send your comments to an address listed under ADDRESSES. Include "AD Docket No. FAA-2004-18958; Directorate Identifier 2004-NE-32-AD" in the subject line of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify it.

We will post all comments we receive, without change, to <http://dms.dot.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact with FAA personnel concerning this AD. Using the search function of the DMS web site, anyone can find and read the comments in any of our dockets, including the name of the individual who sent the comment (or signed the

comment on behalf of an association, business, labor union, etc.). You may review the DOT's complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477-78) or you may visit <http://dms.dot.gov>.

We are reviewing the writing style we currently use in regulatory documents. We are interested in your comments on whether the style of this document is clear, and your suggestions to improve the clarity of our communications with you. You can get more information about plain language at <http://www.faa.gov/language> and <http://www.plainlanguage.gov>.

### **Examining the AD Docket**

You may examine the docket that contains the AD, any comments received, and any final disposition in person at the DMS Docket Offices between 9:00 a.m. and 5:00 p.m., Monday through Friday, except Federal holidays. The Docket Office (telephone (800) 647-5227) is located on the plaza level of the Department of Transportation Nassif Building at the street address stated in ADDRESSES. Comments will be available in the AD docket shortly after the DMS receives them.

### **Regulatory Findings**

We have determined that this AD will not have federalism implications under Executive Order 13132. This AD 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.

For the reasons discussed above, I certify that the 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 summary of the costs to comply with this AD and placed it in the AD Docket. You may get a copy of this summary by sending a request to us at the address listed under ADDRESSES.

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

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

#### **Adoption of the Amendment**

Under the authority delegated to me by the Administrator, the FAA 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. The Federal Aviation Administration (FAA) amends § 39.13 by adding the following new airworthiness directive (AD):

2004-18-01 **Hoffmann Propeller GmbH & Co KG**: Amendment 39-13778. Docket No. FAA-2004-18958; Directorate Identifier 2004-NE-32-AD.

#### **Effective Date**

(a) This AD becomes effective [insert date 15 days after date of publication in the FEDERAL REGISTER].

## **Affected ADs**

(b) None.

## **Applicability**

(c) This AD applies to Hoffmann Propeller GmbH & Co KG (Hoffmann Propeller) models HO-V343 and HO-V343K propellers. These propellers are installed on, but not limited to, general aviation airplanes possibly having an FAA-approved Supplemental Type Certificate.

## **Unsafe Condition**

(d) This AD results from a report of a blade separating from either a model HO-V343 or HO-V343K propeller. We are issuing this AD to prevent propeller hub failure and blade separation due to an unknown root cause, leading to damage and possible loss of control of the airplane.

## **Compliance**

(e) You are responsible for having the actions required by this AD performed within the compliance times specified unless the actions have already been done.

## **Propellers With Hubs Having 1,200 or More Flight Hours-Since-New (FHSN)**

(f) For propellers having hubs with 1,200 or more FHSN, do the following:

(1) Before each flight after the effective date of this AD, perform a preflight check for blade shake. Use paragraph 2.2 of Accomplishment Instructions of Hoffmann Propeller Service Instruction (SI) No. 61-10-05 SI E 4B, dated July 13, 2004, to do this check. If you find any blade shake, do the following before further flight:

(i) Record the blade shake, blade nut preload, and final blade nut torque of all three blades. Use paragraph 2.2 of Accomplishment Instructions of Hoffmann Propeller

Service Instruction (SI) No. 61-10-05 SI E 4B, dated July 13, 2004, to do these recordings and checks.

(ii) Remove propeller blades from the hub. Information on blade removal can be found in Hoffmann Propeller Overhaul Manual No. (E)661.

(iii) Perform an eddy current inspection (ECI) of the propeller hub for damage and cracks. Use paragraphs 2.3 through 2.4 of Accomplishment Instructions of Hoffmann Propeller SI No. 61-10-05 SI E 4B, dated July 13, 2004, to do the ECI.

(iv) If the propeller hub has damage or cracks, remove the propeller hub from service before further flight.

(2) Perform repetitive checks and inspections as specified in paragraphs (f)(1)(i) through (f)(1)(iv) of this AD within intervals of 100 flight hours-since-last-inspection.

**Propellers With Hubs Having Fewer Than 1,200 FHSN**

(g) For propellers with hubs having fewer than 1,200 FHSN, do the following:

(1) Before each flight after the effective date of this AD, perform a preflight check for blade shake, as specified in paragraph (f)(1) of this AD. If blade shake is found, perform the follow-on actions specified in paragraphs (f)(1)(i) through (f)(1)(iv) of this AD.

(2) Perform an ECI of the propeller hub for damage and cracks before exceeding 1,200 FHSN. Use paragraphs 2.3 through 2.4 of Accomplishment Instructions of Hoffmann Propeller SI No. 61-10-05 SI E 4B, dated July 13, 2004, to do the ECI.

### **Alternative Methods of Compliance**

(h) The Manager, Boston Aircraft Certification Office, has the authority to approve alternative methods of compliance for this AD if requested using the procedures found in 14 CFR 39.19.

### **Material Incorporated by Reference**

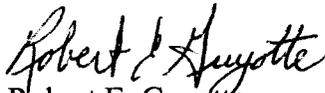
(i) You must use Hoffmann Propeller Service Instruction No. 61-10-05 SI E 4B, dated July 13, 2004, to perform the checks and inspections required by this AD. The Director of the Federal Register approved the incorporation by reference of this service bulletin in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. You can get a copy from Hoffmann Propeller GmbH & Co KG, K pferlingstra e 9, D-83022 Rosenheim, Germany, telephone ++49-(0)8031-1878-0; fax ++49-(0)8031-1878-78; or at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to:

[http://www.archives.gov/federal\\_register/code\\_of\\_federal\\_regulations/ibr\\_locations.html](http://www.archives.gov/federal_register/code_of_federal_regulations/ibr_locations.html).

### **Related Information**

(j) LBA airworthiness directive D-2004-352R2, dated July 23, 2004, which holds EASA Approval No. 2004-7836, also addresses the subject of this AD.

Issued in Burlington, Massachusetts, on August 23, 2004.



Robert E. Guyotte,  
Acting Manager, Engine and Propeller Directorate,  
Aircraft Certification Service.