



## DEPARTMENT OF TRANSPORTATION

### Federal Aviation Administration

#### 14 CFR Part 39

[Docket No. FAA-2020-1104; Project Identifier MCAI-2020-01421-P; Amendment 39-21347; AD 2020-25-05]

RIN 2120-AA64

#### Airworthiness Directives; Hoffmann GmbH & Co. KG Propellers

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

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

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for all Hoffmann GmbH & Co. KG (Hoffmann) model HO-V 72 propellers. This AD was prompted by reports of cracks at different positions on two affected propeller hubs. This AD requires amending the existing aircraft flight manual (AFM) with abnormal propeller vibration instructions. This AD requires visual inspection and non-destructive test (NDT) inspection of the propeller hub and, depending on the results of the inspections, replacement of the propeller hub with a part eligible for installation. This AD also requires replacement of the propeller hub before exceeding 30 years since the date of manufacture or within 30 days after the effective date of this AD, whichever occurs later. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is 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 a certain publication listed in this AD as of [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The FAA must receive comments on this AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <https://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: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this final rule, contact Hoffmann Propeller GmbH & Co. KG, Sales and Service, K pferlingstrasse 9, 83022, Rosenheim, Germany; phone: +49 (0) 8031 1878 0; fax : +49 (0) 8031 1878 78; email: [info@hoffmann-prop.com](mailto:info@hoffmann-prop.com); website: <https://hoffmann-prop.com/>. You may view this service information at the FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (781) 238-7759. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1104.

### **Examining the AD Docket**

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1104; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The street address for the Docket Operations is listed above.

**FOR FURTHER INFORMATION CONTACT:** Michael Schwetz, Aviation Safety Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7761; fax: (781) 238-7199; email: [michael.schwetz@faa.gov](mailto:michael.schwetz@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Background**

The European Union Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2020-

0226-E, dated October 16, 2020 (referred to after this as “the MCAI”), to address an unsafe condition for the specified products. The MCAI states:

Cracks have been reported at different positions on two affected parts, both installed on Slingsby T67 “Firefly” aeroplanes. One crack was found during scheduled inspection, the other crack during an unscheduled inspection after abnormal vibrations occurred. Both cases are under investigation by Hoffmann Propeller.

This condition, if not detected and corrected, could lead to in-flight propeller detachment, possibly resulting in damage to the airplane and/or injury to persons on the ground.

To address this potential unsafe condition, Hoffmann issued the SB [service bulletin], providing applicable instructions.

For the reasons described above, this [EASA] AD requires inspections of affected parts and, depending on findings, replacement, and introduces a life limit for affected parts. This [EASA] AD also requires, for certain aeroplanes, amendment of the applicable Aircraft Flight Manual (AFM).

You may obtain further information by examining the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-1104.

### **FAA’s Determination**

The FAA is issuing this AD because the agency has determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

### **Related Service Information under 1 CFR part 51**

The FAA reviewed Hoffmann Propeller GmbH & Co. KG Service Bulletin SB E53, Rev. B, dated October 14, 2020. This service information specifies procedures for visual and NDT inspections of the propeller hub for cracks. This service information is

reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

### **AD Requirements**

This AD requires amending the existing AFM with abnormal propeller vibration instructions. This AD also requires visual inspection and NDT inspection of the propeller hub and, depending on the results of the inspections, replacement of the propeller hub with a part eligible for installation. This AD also requires replacement of the propeller hub before exceeding 30 years since the date of manufacture or within 30 days after the effective date of this AD, whichever occurs later.

### **Differences Between the AD and the MCAI**

EASA AD 2020-0226-E, dated October 16, 2020, applies to Hoffmann HO-V 72 propellers with propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) that have been used or are expected to be used for aerobatic maneuvers. This AD applies to all Hoffmann model HO-V 72 propellers regardless of their use.

EASA AD 2020-0226-E, dated October 16, 2020, defines the life of the propeller hub as 30 years since the first installation on the airplane. This AD defines the life of the propeller hub as 30 years since the date of manufacture because the installation history of the propeller might be unknown.

### **Interim Action**

The FAA considers this AD interim action. This unsafe condition is still under investigation by the manufacturer and, depending on the results of that investigation, the FAA may consider further rulemaking action.

### **Justification for Immediate Adoption and Determination of the Effective Date**

Section 553(b)(3)(B) of the Administrative Procedure Act (APA) (5 U.S.C. 551 *et seq.*) authorizes agencies to dispense with notice and comment procedures for rules when the agency, for “good cause,” finds that those procedures are “impracticable, unnecessary, or contrary to the public interest.” Under this section, an agency, upon finding good cause, may issue a final rule without providing notice and seeking comment

prior to issuance. Further, section 553(d) of the APA authorizes agencies to make rules effective in less than thirty days, upon a finding of good cause.

An unsafe condition exists that requires the immediate adoption of this AD without providing an opportunity for public comments prior to adoption. The FAA has found that the risk to the flying public justifies foregoing notice and comment prior to adoption of this rule. During a scheduled inspection, a crack was found by an operator on a propeller hub. A second crack was found on another propeller hub during an unscheduled inspection by an operator after abnormal vibrations occurred in-flight. Hoffmann Propeller immediately issued service information instructing operators to visually inspect the hub for cracks before the next flight while the cause of the cracks are under investigation.

A crack in the propeller hub can result in the loss of a propeller blade, resulting in an imbalance in the entire engine which can render the aircraft uncontrollable. The FAA considers a crack in the propeller hub an urgent safety issue that requires an immediate action to avoid potential loss of the airplane. Accordingly, notice and opportunity for prior public comment are impracticable and contrary to the public interest pursuant to 5 U.S.C. 553(b)(3)(B). In addition, the FAA finds that good cause exists pursuant to 5 U.S.C. 553(d) for making this amendment effective in less than 30 days, for the same reasons the FAA found good cause to forego notice and comment.

### **Comments Invited**

The FAA invites you to send any written data, views, or arguments about this final rule. Send your comments to an address listed under ADDRESSES. Include the docket number FAA-2020-1104 and Project Identifier MCAI-2020-01421-P at the beginning of your comments. The most helpful comments reference a specific portion of the final rule, explain the reason for any recommended change, and include supporting data. The FAA will consider all comments received by the closing date and may amend this final rule because of those comments.

Except for Confidential Business Information (CBI) as described in the following paragraph, and other information as described in 14 CFR 11.35, the FAA will post all

comments received, without change, to <https://www.regulations.gov>, including any personal information you provide. The agency will also post a report summarizing each substantive verbal contact received about this final rule.

### **Confidential Business Information**

CBI is commercial or financial information that is both customarily and actually treated as private by its owner. Under the Freedom of Information Act (FOIA) (5 U.S.C. 552), CBI is exempt from public disclosure. If your comments responsive to this AD contain commercial or financial information that is customarily treated as private, that you actually treat as private, and that is relevant or responsive to this AD, it is important that you clearly designate the submitted comments as CBI. Please mark each page of your submission containing CBI as “PROPIN.” The FAA will treat such marked submissions as confidential under the FOIA, and they will not be placed in the public docket of this AD. Submissions containing CBI should be sent to Michael Schwetz, Aviation Safety Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803. Any commentary that the FAA receives which is not specifically designated as CBI will be placed in the public docket for this rulemaking.

### **Regulatory Flexibility Act**

The requirements of the Regulatory Flexibility Act (RFA) do not apply when an agency finds good cause pursuant to 5 U.S.C. 553 to adopt a rule without prior notice and comment. Because FAA has determined that it has good cause to adopt this rule without prior notice and comment, RFA analysis is not required.

### **Costs of Compliance**

The FAA estimates that this AD affects 35 propellers installed on airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

#### **Estimated costs**

<b>Action</b>	<b>Labor Cost</b>	<b>Parts Cost</b>	<b>Cost per product</b>	<b>Cost on U.S. operators</b>
Amend AFM	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$2,975

Visually inspect propeller hub	1 work-hour x \$85 per hour = \$85	\$0	\$85	\$2,975
NDT inspect propeller hub	8 work-hours x \$85 per hour = \$680	\$0	\$680	\$23,800

The FAA estimates the following costs to do any necessary replacement that would be required based on the results of the inspections. The agency has no way of determining the number of aircraft that might need this replacement:

**On-condition costs**

Action	Labor Cost	Parts Cost	Cost per product
Replace propeller hub	5 work-hours x \$85 per hour = \$425	\$1,600	\$2,025

**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.

The FAA is 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.

**Regulatory Findings**

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 this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866, and

(2) Will not affect intrastate aviation in Alaska.

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

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

### **The Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 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 FAA amends § 39.13 by adding the following new airworthiness directive:

**2020-25-05 Hoffmann GmbH & Co. KG:** Amendment 39-21347; Docket No. FAA-2020-1104; Project Identifier MCAI-2020-01421-P.

### **(a) Effective Date**

This airworthiness directive (AD) is effective [INSERT DATE 15 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

### **(b) Affected ADs**

None.

### **(c) Applicability**

This AD applies to all Hoffmann GmbH & Co. KG (Hoffmann) model HO-V 72 propellers.

### **(d) Subject**

Joint Aircraft System Component (JASC) Code 6114, Propeller Hub Section.

### **(e) Unsafe Condition**

This AD was prompted by reports of cracks at different positions on two affected propeller hubs. The FAA is issuing this AD to prevent failure of the propeller hub. The unsafe condition, if not addressed, could result in release of the propeller, damage to the airplane, and injury to persons on the ground.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

(1) Before the next flight after the effective date of this AD, amend the existing aircraft flight manual by inserting the procedure: “Abnormal propeller vibrations: As applicable, reduce engine RPM.”

(2) Before the next flight after the effective date of this AD, and thereafter, before the next flight after any flight where abnormal propeller vibrations have been experienced, visually inspect propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) for cracks using paragraph 2.1 of Hoffmann Propeller GmbH & Co. KG Service Bulletin SB E53, Rev. B, dated October 14, 2020 (the SB).

(3) Within 20 flight hours after the effective date of this AD, perform a non-destructive test (NDT) inspection of propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) using paragraph 2.3 of the SB.

(4) If, during any inspection required by paragraph (g)(2) or (3) of this AD, any crack is detected, replace propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) with a part eligible for installation.

(5) During each overhaul of propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) after the effective date of this AD, perform an NDT inspection using paragraph 2.3 of the SB.

(6) Before exceeding 30 years since the date of manufacture, or within 30 days after the effective date of this AD, whichever occurs later, replace propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) with a part eligible for installation.

**(h) Definition**

For the purpose of this AD, a “part eligible for installation” is a propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) with zero hours time since new or a propeller hub HO-V 72 ( ) ( ) - ( ) - ( ) that has accumulated fewer than 30 years since the date of manufacture and has passed an NDT inspection using paragraph 2.3 of the SB.

**(i) Non-Required Actions**

(1) Sending the propeller to Hoffmann for investigation, as contained in paragraph 2.1 of the SB, is not required by this AD.

(2) Reporting propeller hubs with cracks to Hoffmann, as contained in paragraph 2.3 of the SB, is not required by this AD.

**(j) Credit for Previous Actions**

You may take credit for the initial visual inspection and NDT inspection of the propeller hub required by paragraphs (g)(2), (3), and (5) of this AD if you performed any of these actions before the effective date of this AD using Hoffmann Propeller GmbH & Co. KG SB E53 Rev. A, dated October 9, 2020.

**(k) Special Flight Permit**

A special flight permit may be issued in accordance with 14 CFR 21.197 and 21.199 to operate the airplane to a service facility to perform the NDT inspection. Special flight permits are prohibited to perform the visual inspection of the propeller hub.

**(l) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Boston ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in Related Information.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(m) Related Information**

(1) For more information about this AD, contact Michael Schwetz, Aviation Safety Engineer, Boston ACO Branch, FAA, 1200 District Avenue, Burlington, MA 01803; phone: (781) 238-7761; fax: (781) 238-7199; email: michael.schwetz@faa.gov.

(2) Refer to European Union Aviation Safety Agency (EASA) AD 2020-0226-E, dated October 16, 2020, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating it in Docket No. FAA-2020-1104.

**(n) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) Hoffmann Propeller GmbH & Co. KG (Hoffmann) Service Bulletin SB E53, Rev. B, dated October 14, 2020.

(ii) [Reserved]

(3) For Hoffmann service information identified in this AD, contact Hoffmann Propeller GmbH & Co. KG, Sales and Service, K pferlingstrasse 9, 83022, Rosenheim, Germany; phone: +49 (0) 8031 1878 0; fax : +49 (0) 8031 1878 78; email: info@hoffmann-prop.com; website: https://hoffmann-prop.com/.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 1200 District Avenue, Burlington, MA 01803. For information on the availability of this material at the FAA, call (781) 238-7759.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fedreg.legal@nara.gov, or go to: https://www.archives.gov/federal-register/cfr/ibr-locations.html.

Issued on November 30, 2020.

Lance T. Gant, Director,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-26765 Filed: 12/4/2020 8:45 am; Publication Date: 12/7/2020]