



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2018-0281; Product Identifier 2018-NE-06-AD; Amendment 39-19437; AD 2018-20-03]**

**RIN 2120-AA64**

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

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

**ACTION:** Final rule.

**SUMMARY:** We are adopting a new airworthiness directive (AD) for certain Hoffmann GmbH & Co. KG model HO-V 62 propellers. This AD was prompted by the failure of the propeller blade lag screws. This AD requires removal of the affected propeller blades and installation of modified propeller blades marked with change letter “A” or “B.” We are issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** 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). You may view this service information at the FAA, Engine & Propeller Standards 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 on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0281.

## **Examining the AD Docket**

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0281; 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, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for Docket Operations (phone: 800-647-5527) is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC, 20590.

**FOR FURTHER INFORMATION CONTACT:** Maureen Maisttison, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Ave, Burlington, MA, 01803; phone: 781-238-7076; fax: 781-238-7151; email: [maureen.maisttison@faa.gov](mailto:maureen.maisttison@faa.gov).

## **SUPPLEMENTARY INFORMATION:**

### **Discussion**

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Hoffmann GmbH & Co. KG model HO-V 62 propellers. The NPRM published in the Federal Register on July 12, 2018 (83 FR 32219). The NPRM was prompted by the failure of the propeller blade lag screws. The NPRM proposed to require removal of the affected propeller blades and installation of modified propeller blades marked with change letter “A” or “B.” We are issuing this AD to address the unsafe condition on these products.

The European Aviation Safety Agency (EASA), which is the Technical Agent for the Member States of the European Community, has issued EASA AD 2017-0220, dated November 10, 2017 (referred to after this as “the MCAI”), to address the unsafe condition on these products. The MCAI states:

In 1983, occurrences were reported of fatigue failure of propeller blade lag screws, at rotation speeds between 2950 and 3250 revolutions per minute (RPM) in flight.

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

To address this potential unsafe condition, Hoffmann issued Service Bulletin (SB) 4, providing the necessary instructions. Consequently, LBA Germany issued AD 83-150 (later revised), which applied only to HO-V 62 propellers with R/L 160T blades, when in combination with a Limbach L 2000 engine, to require a limitation of continuous operation to 2 900 RPM, to prohibit aerobatic flights, calibrate the tachometer, install a placard, and inspection of the propeller blades. LBA AD 83-150/4 also required overhaul and replacement of the affected propeller blades with modified blades, either having 5 lag screws with 12 mm diameter, or 6 screws, and required implementing a time between overhaul (TBO) of 600 flight hours (FH).

Since that [LBA] AD was issued, based on a stress analysis of lag screws on blades with continuous operating speed above 2 900 RPM, it was determined that the 6-screws configuration or the 5 screws configuration with increased strength is necessary to ensure safe propeller operation. In addition, since the LBA AD applied only to a limited population (Limbach engine only), many propellers have not been modified as described in Hoffmann SB 4C. Consequently, Hoffmann issued SB E34 Revision B, to provide blade replacement instructions

You may obtain further information by examining the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0281.

### **Comments**

We gave the public the opportunity to participate in developing this final rule. We received no comments on the NPRM or on the determination of the cost to the public.

### **Revised the Name of the Type Certificate Holder**

We determined that the name of the type certificate (TC) design holder that we used in the NPRM does not match the name used in the type certificate data sheet. We

have revised references in this AD from “Hoffmann Propeller GmbH & Co. KG” to “Hoffmann GmbH & Co. KG” when we are referring to the name of the TC design holder.

**Conclusion**

We reviewed the relevant data and determined that air safety and the public interest require adopting this final rule as proposed except for minor editorial changes.

We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

**Related Service Information**

We reviewed Hoffmann Propeller GmbH & Co. KG Service Bulletin (SB) E34 Rev. B, dated September 18, 2017. The SB describes the instructions for the removal and installation of the propeller blades.

**Costs of Compliance**

We estimate that this AD affects 50 propellers installed on airplanes of U.S. registry.

We estimate 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>
Replace blades between overhaul	3 work-hours X \$85 per hour = \$255	\$3,150	\$3,405	\$85,125
Replace blades at overhaul	0 work-hours X \$85 per hour = \$0	\$3,150	\$3,150	\$78,750

### **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.

This AD is issued in accordance with authority delegated by the Executive Director, Aircraft Certification Service, as authorized by FAA Order 8000.51C. In accordance with that order, issuance of ADs is normally a function of the Compliance and Airworthiness Division, but during this transition period, the Executive Director has delegated the authority to issue ADs applicable to engines, propellers, and associated appliances to the Manager, Engine and Propeller Standards Branch, Policy and Innovation Division.

### **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 this AD:

(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),

(3) Will not affect intrastate aviation in Alaska, and

(4) 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.

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

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

**Adoption of 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 (AD):

2018-20-03 **Hoffmann GmbH & Co. KG**: Amendment 39-19437; Docket No. FAA-2018-0281; Product Identifier 2018-NE-06-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to Hoffmann GmbH & Co. KG model HO-V 62 propellers without modified blades marked with change letter “A” or “B” suffix to the serial number (S/N).

**(d) Subject**

Joint Aircraft System Component (JASC) Code 6110, Propeller Assembly.

**(e) Unsafe Condition**

This AD was prompted by the failure of the propeller blade lag screws. We are issuing the AD to prevent failure of the propeller. The unsafe condition, if not addressed, could result in the release of the propeller blade, damage to the aircraft, and injury and/or loss of life.

**(f) Compliance**

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

**(g) Required Actions**

Within 30 days of the effective date of this AD, remove the applicable propeller blades and install modified propeller blades marked with a change letter “A” or “B” suffix to the S/N marked on the blade.

**(h) Installation Prohibition**

After the effective date of this AD, do not install a propeller blade if it is not marked with a change letter “A” or “B” suffix to the S/N marked on the blade.

**(i) 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 Boston ACO Branch, send it to the attention of the person identified in paragraph (j)(1) of this AD.

(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.

**(j) Related Information**

(1) For more information about this AD, contact Maureen Maisttison, Aerospace Engineer, Boston ACO Branch, FAA, 1200 District Ave, Burlington, MA, 01803; phone: 781-238-7076; fax: 781-238-7151; email: maureen.maisttison@faa.gov.

(2) Refer to European Aviation Safety Agency AD 2017-0220, dated November 10, 2017, for more information. You may examine the EASA AD in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2018-0281.

Issued in Burlington, Massachusetts, on September 27, 2018.

Robert J. Ganley,  
Manager, Engine and Propeller Standards Branch,  
Aircraft Certification Service.  
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