

Emergency Airworthiness Directive

AD No.: 2020-0226-E

Issued: 16 October 2020

Note: This Emergency Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EU) 2018/1139 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 129 of that Regulation.

This AD is issued in accordance with Regulation (EU) 748/2012, Part 21.A.3B. In accordance with Regulation (EU) 1321/2014 Annex I, Part M.A.301, the continuing airworthiness of an aircraft shall be ensured by accomplishing any applicable ADs. Consequently, no person may operate an aircraft to which an AD applies, except in accordance with the requirements of that AD, unless otherwise specified by the Agency [Regulation (EU) 1321/2014 Annex I, Part M.A.303] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

Hoffmann Propeller GmbH & Co. KG

Type/Model designation(s):

HO-V 72 propellers

Effective Date: 20 October 2020

TCDS Number(s): LBA 32.130/19

Foreign AD: Not applicable

Supersedure: None

ATA 61 – Propellers – Propeller Hub – Inspection / Replacement

Manufacturer(s):

Hoffmann Propeller GmbH & Co. KG, formerly Hoffmann, Propellerwerk Hoffmann Rosenheim

Applicability:

HO-V 72 propellers, all serial numbers (s/n).

These propellers are known to be installed on, but not limited to, Slingsby T67 "Firefly" aeroplanes.

Definitions:

For the purpose of this AD, the following definitions apply:

Affected part: Propeller hub HO-V72 () – (), which has been used, or is expected to be used for, aerobatic manoeuvres.

Serviceable part: A propeller hub which is not an affected part; or an affected part which is new; or an affected part having accumulated less than 30 years since first installation on an aeroplane and that passed a NDT inspection, as defined in this AD.

The SB: Hoffmann Propeller Service Bulletin (SB) E53.

NDT inspection: Non Destructive Test (NDT) inspection, including a dye penetrant inspection of the affected part and eddy current inspection of the threads of the hub sockets.

Affected aeroplane: Any aeroplane having an affected part installed.

Reason:

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, providing applicable instructions.

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

Required Action(s) and Compliance Time(s):

Required as indicated, unless accomplished previously:

AFM Amendment:

- (1) For affected aeroplanes: Before next flight after the effective date of this AD, amend the applicable AFM by inserting the AFM Amendment as specified in Appendix 1 of this AD (unless the applicable AFM already contain similar emergency procedures), inform all flight crew and, thereafter, operate the aeroplane accordingly.
- (2) Introducing a later approved AFM Revision, including the content of the AFM Amendment, as defined in this AD, into the applicable AFM is an acceptable method to comply with the requirements of paragraph (1) of this AD for that aeroplane.

Inspections:

- (3) Before next flight after the effective date of this AD, and, thereafter, before next flight after any flight where abnormal vibrations have been reported, visual inspect the affected part for cracks in accordance with the instructions of the SB.
- (4) Within 20 flight hours after the effective date of this AD, perform an NDT inspection, as defined in this AD, of the affected part in accordance with the instructions of the SB.

Corrective Actions:

- (5) If, during any inspection as required by paragraphs (3) or (4) of this AD, any crack is detected, replace the affected part with a serviceable part. This can be accomplished in accordance with the instructions of the propeller maintenance manual.



In-shop inspections (Overhaul):

- (6) From the effective date of this AD, during each overhaul of an affected part, accomplish an NDT inspection, as defined in this AD, in accordance with the instructions of the SB.

Life Limit:

- (7) Before exceeding 30 years since first installation on an aeroplane, or within 30 days after the effective date of this AD, whichever occurs later, replace any propeller hub HO-V72 () – () – () with a serviceable part. This can be accomplished in accordance with the instructions of the propeller maintenance manual.

Parts Installation:

- (8) From the effective date of this AD, it is allowed to install an affected part on an aeroplane provided it is a serviceable part, as defined in this AD, and the AFM has been amended as required by paragraph (1) of this AD, as applicable.

Ref. Publications:

Hoffmann Propeller SB E53 Revision A dated 09 October 2020, and Revision B dated 14 October 2020.

The use of later approved revisions of the above-mentioned document is acceptable for compliance with the requirements of this AD.

Remarks:

1. If requested and appropriately substantiated, EASA can approve Alternative Methods of Compliance for this AD.
2. The results of the safety assessment have indicated the need for immediate publication and notification, without the full consultation process.
3. Enquiries regarding this AD should be referred to the EASA Programming and Continued Airworthiness Information Section, Certification Directorate. E-mail: ADs@easa.europa.eu.
4. Information about any failures, malfunctions, defects or other occurrences, which may be similar to the unsafe condition addressed by this AD, and which may occur, or have occurred on a product, part or appliance not affected by this AD, can be reported to the [EU aviation safety reporting system](#). This may include reporting on the same or similar components, other than those covered by the design to which this AD applies, if the same unsafe condition can exist or may develop on an aeroplane with those components installed. Such components may be installed under an FAA Parts Manufacturer Approval (PMA), Supplemental Type Certificate (STC) or other modification.
5. For any question concerning the technical content of the requirements in this AD, please contact: Hoffmann Propeller GmbH & Co. KG, Sales and Service, K pferlingstrasse 9, 83022 Rosenheim, Germany, Telephone : +49 (0) 8031 1878 0, Fax : +49 (0) 8031 1878 78 E-mail: info@hoffmann-prop.com.



Appendix 1 – AFM Amendment

Procedure

Abnormal propeller vibrations:

As applicable, reduce engine RPM

Revised

