



## Airworthiness Directive

**AD No.:** 2017-0220

**Issued:** 10 November 2017

Note: This Airworthiness Directive (AD) is issued by EASA, acting in accordance with Regulation (EC) 216/2008 on behalf of the European Union, its Member States and of the European third countries that participate in the activities of EASA under Article 66 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 (EC) 216/2008, Article 14(4) exemption].

### Design Approval Holder's Name:

Hoffmann Propeller GmbH & Co. KG

### Type/Model designation(s):

HO-V 62 propellers

**Effective Date:** 24 November 2017

**TCDS Number(s):** LBA 32.130/13

**Foreign AD:** Not applicable

**Supersedure:** This AD supersedes Luftfahrt-Bundesamt (LBA) Germany [AD 83-150/4](#), dated 21 December 1984.

## ATA 61 – Propellers – Propeller Blades – Inspection / Replacement

### Manufacturer(s):

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

### Applicability:

HO-V 62 propellers, all serial numbers (s/n).

These propellers are known to be installed on, but not limited to, Diamond H 36 “Dimona”, Scheibe SF 25 “Falke”, Korff Luftfahrt (formerly Valentin) Taifun 17E, Schleicher ASK 16, E.I.S. Aircraft (formerly Fournier) RF 5 “Sperber” and Grob G 109 powered sailplanes.

### Reason:

In 1983, occurrences were reported of fatigue failure of propeller blade lag screws, at rotation speeds between 2 950 and 3 250 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 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.

For the reason described above, this AD partially retains the requirements of LBA AD 83-150/4, which is superseded, and requires replacement of the affected blades with modified blades.

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

Required as indicated, unless accomplished previously:

#### **Partial Re-statement of the Requirements of LBA Germany AD 83-150/4:**

Applicable to HO-V 62 propellers with R/L 160T blades, when in combination with a Limbach L 2000 (any model) engine:

#### **Limitations:**

- (1) Before next flight after 21 December 1984, amend the applicable Aircraft Flight Manual (AFM) in accordance with the instructions of Part 1, Item 1, of Hoffmann SB 4, inform all pilots and, thereafter, operate the powered sailplane and engine accordingly.
- (2) Within 10 FH after 21 December 1984, calibrate the tachometer and install placards in full view of the pilot(s) in accordance with the instructions of Part 2, figure 2, of Hoffmann SB 4.

#### **Overhaul / Modification:**

- (3) Within 10 FH after 21 December 1984, but not later than 31 March 1985, remove the propeller from service (for overhaul and modification) in accordance with the instructions of Part 3 of Hoffmann SB 4.
- (4) For propellers that have already been modified before 21 December 1984, and marked with "SB 4" at the base collar, as required by paragraph (2) of this AD, before exceeding 600 FH since first installation of the propeller, or since overhaul, as applicable, or within the time specified in Part 2 of Hoffmann SB 4C, whichever occurs later, but not later than 31 August 1985, remove the propeller blades from service (for overhaul and modification) in accordance with the instructions of Part 3 of Hoffmann SB 4; and replace the blades with modified blades, having a ferrule configuration "A" or "B" as identified in Part 3 of Hoffmann SB 4.

#### **Limitations Removal:**

- (5) After modification of a propeller as required by paragraph (4) of this AD, the AFM limitation and placards as required by paragraphs (1) and (2) of this AD are no longer required and may be removed from the powered sailplane.



**New Requirements of this AD:**

Note 1: Hoffmann propeller blades with s/n 1 to 6049 inclusive, except those having a ferrule configuration with change letter “A” or “B”, are hereafter referred to as ‘affected blades’ in this AD.

Note 2: Group 1 propellers are those that have affected blades (see Note 1 of this AD) installed. Group 2 propellers are those that have blades installed having a ferrule configuration with change letter “A” or “B”.

**Limitation:**

(6) For Group 1 propellers: Within 30 days after the effective date of this AD, amend the applicable flight manual by reducing the maximum propeller speed to 2 900 RPM in accordance with the instructions of Hoffmann SB E34, inform all pilots and, thereafter, operate the powered sailplane and engine accordingly.

**Modification:**

(7) For Group 1 propellers: During the next scheduled propeller overhaul, or within 50 FH after the effective date of this AD, whichever occurs earlier, remove the propeller blades from service (for overhaul and modification) and replace the blades with modified blades, having a ferrule configuration identified as “A” or “B”, in accordance with the instructions of Hoffmann SB E34.

**Limitation Removal:**

(8) After modification of a propeller as required by paragraph (7) of this AD, the limitation as required by paragraph (6) of this AD is no longer required and may be removed from the flight manual of the affected powered sailplane on which the propeller is installed.

**Parts Installation:**

(9) Do not install an affected blade (see Note 1 of this AD) on any propeller, as required by paragraph (9.1) or (9.2) of this AD, as applicable.

(9.1) For Group 1 propellers: After modification of the propeller as required by paragraph (7) of this AD.

(9.2) For Group 2 propellers: From the effective date of this AD.

**Ref. Publications:**

Propellerwerk Hoffmann Rosenheim SB 4 dated 15 July 1983, or SB 4A dated 15 August 1983, or SB 4B dated 18 January 1984, or [SB 4C](#) dated 20 February 1984.

Hoffmann Propeller SB E34 Revision A dated 09 August 2017, or [Revision B](#) dated 18 September 2017.

The use of later approved revisions of these documents 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. This AD was posted on 26 September 2017 as PAD 17-131 for consultation until on 24 October 2017. The Comment Response Document can be found in the [EASA Safety Publications Tool](#), in the compressed (zipped) file attached to the record for this AD.
3. Enquiries regarding this AD should be referred to the EASA Safety Information Section, Certification Directorate. E-mail: [ADs@easa.europa.eu](mailto:ADs@easa.europa.eu).
3. 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  
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