

Küpferringstraße 9
D-83022 Rosenheim
Phone: ++49-(0)8031-1878-0
Fax.: ++49-(0)8031-1878-78

HOFFMANN PROPELLER
Service Bulletin 61-10-03 E 1 AH

27 March 2008

Supersedes SB 61-10-03 E 1 AG dated 15 March 2007

1.1 Effectivity

Propellers affected: All HOFFMANN propellers.

Installations affected: All aircrafts and other vehicles operating with these propellers.

1.2 Reason


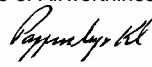
To comply with the requirements of continued airworthiness Overhaul Periods (TBO) and Service Life Limits must be established for ground adjustable and variable pitch propellers.

1.3 Description

The established Times Between Overhaul are a result of a TBO-development-program. They are expressed in hours in service and / or calendar time. Always latest edition of this bulletin is mandatory. Deviations require the written approval of the manufacturer Hoffmann GmbH & Co.KG.

1.4 Approval

The technical content of this document is approved under the authority of DOA Nr. EASA.21J.083

Edition AH dated 27 March 2008 supersedes Edition AG dated 15 March 2007	Written:  R. Stöckl 27 March 2008	Approved: Office of Airworthiness:  K. Pappenberger 27 March 2008	SB 61-10-03 E 1 AH Seite 1 of 7
---	---	--	---

- 1.5 Manpower** Not affected.
- 1.6 Material - cost and availability** Not affected
- 1.7 Tooling** Not affected
- 1.8 Weight and Balance** Not affected.
- 1.9 Electrical Load Data** Not Affected
- 1.10 Software Accomplishment Summary** Not Affected
- 1.11 References**

All HOFFMANN Manuals

NOTE: Life Limits have been published in the Airworthiness Limitation Section of the appropriate Hoffmann manuals. If Data's do not correspond with data's in this Service Bulletin the newest date of revision is valid. In normal case that will be the present SB because Life Time Extensions have not yet been incorporated into all manuals.

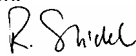
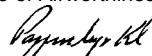
- 1.12 Other Publications** None
- 1.13 Family Tree Chart of Modification Relationships** Not applicable
- 1.14 Interchangeability or Intermixability of Parts**

For propellers that have been rebuilt with parts from other propellers consideration of TSN of the hub and each blade should be made in the propeller logbook (see also 2.6.1).

The Serial Number of the hub remains the Propeller Number.

The TBO of the hub is valid as TBO of this propeller.

If the TBO of the blades further dated back these blades have to be observed with care (see also 2.3.7)

Edition AH dated 27 March 2008 supersedes Edition AG dated 15 March 2007	Written:  R. Stöckl 27 March 2008	Approved: Office of Airworthiness:  K. Pappenberger 27 March 2008	SB 61-10-03 E 1 AH Seite 2 of 7
---	---	--	---


2. Accomplishment Instructions

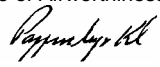
2.1 Approved Time Limits

1	2	3	4	5	6
Propeller Type	Blades	Engine	Propeller TCDS EASA / FAA	Operating hours	Time Months
All HO (), HO-E () und HO-V () Propeller, which are <u>not</u> especially named in this table			--	200	72
Dorn 72	n.a.	various	LBA 32.110/005	For this propellers is no calendar time limitation to observe. Repair or Overhaul is only necessary after damage or in case of cracks in the blade tipping, the paint or the bore.	
HO Series			LBA 32.110/001 7P2, P26NE, P3EU		
HO4 Series			LBA 32.110/011 P6NE		
HOCO F-LM2			LBA 32.110/002		
HOCO-HMES			LBA 32.110/003 7P1		
HO-E 292()	292 DV	BMW 132A3	--	1.000	72
HO-E 315()	122 EZ	Lycoming (IO-540 - V4A5D)	LBA 32.120/003 / --	800	72
HO-E 473	LD130KR-P	various	--	500	72
HO-V 12	Model is old and will not be overhauled				
HO-V 42/48-()-()	All models	Hirth F10()	LBA 32.130/011 / --	300	72
HO-V 42/48-()-()-R	All models	Hirth F10()		200	72
		Rectimo 4AR1200		200	72
HO-V 62()	170 Y	TCM/RR 0-200-()	LBA 32.130/013 / P 7 EU	200	72
	All models	Limbach SL 1700-()		1.000	72
	L 160 BT	Limbach L 2000-()		1.000	72
	L 160 T	Limbach L 2000-()		1.000	72
	L160 BT	Limbach L 2400-()		1.200	72
	L 160 BT	Grob 2500 ()		1.600	72
	L 160 BT	Mikron III A,B, E		800	72
	L 160 BT	Sauer SS 2100 ()		700	72
	L 160 BT	Sauer SS 2500 ()		600	72
HO-V 72()	All models	Rotax 912-A(), 912-F()	LBA 32.130/019 / P 9 BO	1.500	72
	()170 DW	Lycoming. ()O-320-()		1.000	72
HO-V 92()	195 C	Rotax 912-A(), 912-F()	LBA 32.130/015 / --	1.500	72
HO-V 113()	LD 150 +2A	Continental ()O-470-()		1.200	72
HO-V 123()	185 V	Lyc. O-235 (Speed Canard)	LBA 32.130/016 / --	400	72
	All models	Franklin 6A350-C1		600	72
HO-V 123()-D()	220GV	Avco-Lycom., Porche, TCM	LBA 32.130/017 / P 5 EU	1.500	72
		Lycoming ()O-360-()		3.000	72
HO-V 155()	137 CL	Porsche 930-67	--	1.500	72
	137 BC	Porsche 930-03		1.500	72
	167 EE	Porsche		400	72
HO-V 245()	LD 120 CM	Allison	LBA 32.130/058 / --	500	72

Edition AH
dated 27 March 2008

supersedes Edition AG
dated 15 March 2007

Written:

R. Stöckl
27 March 2008

Approved: Office of Airworthiness:

K. Pappenberger
27 March 2008

SB 61-10-03 E 1 AH

Seite 3 of 7

HO-V 254()	D275CS-PIA	Deutz Diesel	--	1.200	72
	D275DE-PIA			2.000	72
	()275() ()	Caterpillar Mod. 3412E		2.000	72
HO-V 343()	180 FP	Lycoming. ()O-360-()	LBA 32.130/090 / P 12 BO	1.600	72
	183 GY			1.600	72
HO-V 352()	170 FQ+10	Rotax 914()	LBA 32.130/088 / TP 5 BO	1.200	72
	170 FQ+10	Rotax 912-S()		1.500	72
	170 FQ	Rotax 912-A(),-F(), S()		1.500	72
	170 FQ-10	Sauer SM 2700 H1S		200	72
HO-V 373()-D()-()	()270FU()	Lycoming ()O-360-()	LBA 32.130/096 / --	3.000	72
DOWTY	(L)328 BQ L 318 DA 335 EA 328FS 328DG	various	--	700	72

2.2 Start of TBO

2.2.1 The TBO starts with the installation on the aircraft / craft.

It is a precondition that the date of production or overhaul dates not more back than 24 months and the propeller was stored in proper conditions.

2.2.2 After this point of time a tear-down inspection has to be performed at HOFFMANN or a workshop approved by HOFFMANN.

TBO than starts

2.2.2.1 with date of Production or last Overhaul


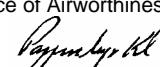
if the propeller has been in service, has been removed and stored longer than 24 months

or

2.2.2.2 with date of tear-down inspection

if the propeller was not in service after Production or last Overhaul and has been stored longer than 24 months.

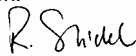
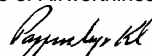
Alternatively therefore the time can be set back to 0 hours TSO (Time Since Overhaul) when performing a TBO-extension program by HOFFMANN or a workshop approved by HOFFMANN or can be cleared for a further limited time.

Edition AH dated 27 March 2008 supersedes Edition AG dated 15 March 2007	Written:  R. Stöckl 27 March 2008	Approved: Office of Airworthiness:  K. Pappenberger 27 March 2008	SB 61-10-03 E 1 AH Seite 4 of 7
---	---	--	---

2.3 Overhaul is necessary,

- 2.3.1 when reaching the Operating Hours Limitation as shown in column 5 in table 2.1,
- 2.3.2 when reaching Calendar Time Limit as shown in column 6 in table 2.1, independent of time in service,
- 2.3.3 after ground strike with broken blade tips,
- 2.3.4 after Foreign Object Strike (FOD),
- 2.3.5 after Overspeed (more than 10%),
- 2.3.6 after Lightning stroke,
- 2.3.7 after detecting extreme corrosion, leakage, cracks or other damages which can not be repaired,
- 2.3.8 before going to service if date of production or last overhaul is unknown.

Overhaul can only be performed by Hoffmann GmbH & Co.KG or a workshop approved by Hoffmann.

Edition AH dated 27 March 2008 supersedes Edition AG dated 15 March 2007	Written:  R. Stöckl 27 March 2008	Approved: Office of Airworthiness:  K. Pappenberger 27 March 2008	SB 61-10-03 E 1 AH Seite 5 of 7
---	---	--	---

2.4 Deviations

2.4.1 Calendar Time

When installed in airplanes the calendar time of 72 months can be extended to coincide with the next annual inspection of the aircraft if the propeller is in a proper condition and the limit of hours in service is not yet reached.

A total of 84 months (7 years) must not be exceeded.

Calendar Limit is not interrupted by subsequent removal and / or storage.
(see also 1.2.2 and 1.2.5)

2.4.2 Acrobatics / Aerobatics

All types used in aerobatic flights are limited to 500 hours aerobatic flight

- if the operation limitation in table 2.1 is more than 500 hours an overhaul will be due after reaching 500 hours acrobatic flight
- if the operation limitation in table 2.1 is less than 500 hours this smaller figure is effective for the TBO.

2.4.3 AD's (Airworthiness Directives)

Actual effective AD's and / or other technical instructions may reduce the TBO published in this Service Bulletin.

2.4.4 Special conditions

Some propellers may require overhaul before the specified TBO limits. Propellers subjected to abnormal use or environmental exposure, particularly seaplanes and vessels, arctic or tropical conditions often require premature overhaul when abnormal damage or corrosion is evident.


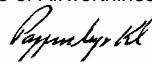
2.4.5 TBO extension

Experience has shown that special care, such as keeping an aircraft hangared, is not sufficient to allow extension of the calendar limit automatically.

In singular cases the TBO may be extended on request by performing an inspection program and estimation of further circumstances. Such an extension is always singular and has to be repeated – if requested – at the end of the next period.

The extension is only valid for the requested application and not for the Type / Model at all.

This procedure can be performed only by the manufacturer Hoffmann GmbH & Co.KG.

Edition AH dated 27 March 2008 supersedes Edition AG dated 15 March 2007	Written:  R. Stöckl 27 March 2008	Approved: Office of Airworthiness:  K. Pappenberger 27 March 2008	SB 61-10-03 E 1 AH Seite 6 of 7
---	---	--	---

2.5 Long Term Storage

The effects of exposure to the environment over a period of time create a need for propeller overhaul regardless of time in service. Therefore a calendar limit between overhauls is specified in chapter 2.1. column 6.

Ground adjustable or variable pitch propellers contain parts, which are subject to an ageing process, even though – or more than ever - the propeller is not in use. Thereby it is insubstantial whether the propeller is stored already before first installation or removed and stored after some time in service.

2.5.1 Advice for appropriate storage:

Propellers should be stored in the original packing, in a dry room with no extreme temperature changes. Do **NOT** store the propeller standing on the tips

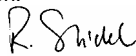
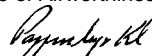
2.5.2 Investigations

Propellers in storage for more than 24 months (Long Term Storage) have additional inspection requirements. A tear-down inspection at HOFFMANN or an authorised workshop is necessary.

Changing aged parts at this opportunity renews only the airworthiness, TBO and / or TSO (Time Since Overhaul) are not affected.

2.6 Required records

- 2.6.1 Service hours and every repair, modification, overhaul as well as installation and removal from the craft are to be listed in the propeller log book or log card. Log book or log card shall be kept together with the propeller and they shall be attached when the propeller is removed and stored. Alternatively other written records may be established.
- 2.6.2 The TBO listed in this Service Bulletin shall be recorded in the aircraft log book.

Edition AH dated 27 March 2008 supersedes Edition AG dated 15 March 2007	Written:  R. Stöckl 27 March 2008	Approved: Office of Airworthiness:  K. Pappenberger 27 March 2008	SB 61-10-03 E 1 AH Seite 7 of 7
---	---	--	---