



Service Bulletin

No. 1-1 R3

Subject: Time Between Overhaul (TBO) of Propellers for Hovercraft applications

1.1 Effectivity:

Propellers affected: All MT-Propeller Hovercraft Propellers
Installation affected: All Hovercraft applications operating with these propellers

1.2 Reason:

To comply with the requirements of Continued Airworthiness Overhaul Periods (TBO), Service Life Limits must be established for variable pitch propellers.

1.3 Description:

The established Time Between Overhaul (TBO) is a result of a TBO-development program.
TSO (Time Since Overhaul)
TSN (Time Since New)
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 MT-Propeller Entwicklung GmbH.
The limits are shown under 2.1 "Approved Time Limits."



1.4 Interchangeability or Intermixability of Parts:

Propellers that have been rebuilt with parts from other propellers:
The TSN of the hub and each blade should be recorded in the propeller logbook (see also 2.5.1).
The Serial Number of the hub remains the Propeller Serial Number.
If the TSO of the blades is different than the TSO of the hub, the part which had been in operation for the longer time defines the remaining time until overhaul.

Changes of Propellers between Applications:

The shorter TBO will define the complete TBO of this propeller.
Due to this reason a prolongation of TBO by using another application is not possible.

A one-time-permit for TBO extension could be given in exceptional cases but has to be authorized by MT-Propeller Entwicklung GmbH.

Checked/Approved by:  Martin Albrecht Head of Office of Airworthiness	Original Issue: September 15 th , 2017 Revision 3: March 18 th , 2022	Prepared by:  Daniel Böber CVE
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Accomplishment Instructions

2.1 Approved Time Limits:

<i>Propeller</i>	<i>Engine</i>	<i>Hours</i>	<i>Months</i>
MTV-5-(-)(**)/(**)199-117	Diesel (Hovercraft)	2000	60
MTV-27-(-)(**)/(**)220-121	Diesel (Hovercraft)	2000	60
MTV-27-(-)(**)/(**)260-121	Diesel (Hovercraft)	2000	60
MTV-27-(-)(**)-J/(**)350-132a	Diesel (Hovercraft)	2000	60
MTV-27-(-)(**)-J/(**)350-132b	Diesel (Hovercraft)	2300	60
MTV-28-1-I/L410-127d	Airodium / Elektro 4000 HP	3000	60
MTV-28-1-I/L496-127	Airodium / Elektro 4000 HP	3000	60
MTV-28-2-(**)/(**)358-160 Bearing Assembly P/N P457-410-1000	Turbine (Hovercraft) 5000 HP at 1298 RPM	200	60

2.2 Start of TBO:

2.2.1 The hours for operating start with the first run of the Hovercraft.

2.2.2 The calendar time starts with production date or last overhaul date.

Remark:

The TBO is also valid for propellers with an up to 5 cm smaller diameter.

2.3 Overhaul is necessary:

2.3.1 when reaching the time limits as shown in table 2.1

2.3.2 after green water impact

2.3.3 after Foreign Object Strike (FOD)

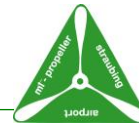
2.3.4 after Overspeed (more than 10%)

2.3.5 after Lightning Strike

2.3.6 after detecting extreme corrosion, leakage, cracks or other damages which cannot be repaired.

2.3.7 before using the propeller if date of production or last overhaul is unknown

Overhaul may only be performed either by MT-Propeller Entwicklung GmbH or at any officially approved MT-Propeller Service Station.



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2.4 Deviations:

2.4.1 Calendar Time

The calendar time can be extended to coincide with the next inspection of the craft.
Presuppose for that the propeller has to be in a proper condition and the limit (as shown under 2.1 "Approved Time Limits") is not reached.
A total of 84 months (7 years) must not be exceeded.

2.4.2 Special Conditions

Some propellers may require overhaul before the specified TBO limits.
Propellers subjected to abnormal use or environmental exposure or tropical conditions often require premature overhaul when abnormal damage or corrosion is evident.
Therefore: TBO of propeller is always on condition.

2.4.3 TBO Extension

Experience has shown that special care, such as keeping a Hovercraft in hangar, is not sufficient to allow extension of the limits 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 given period.
The extension is only valid for the requested application and not for the Type / Model at all.
This procedure may be performed only by the manufacturer MT-Propeller Entwicklung GmbH.

2.5 Required Records:

2.5.1 Service hours and every repair, modification, overhaul as well as installation and removal from the Hovercraft 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.
Log card should be kept in Hovercraft log book whilst fitted to the Hovercraft.
Alternative other written records may be established.

2.5.2 The TBO listed in this Service Bulletin shall be recorded in the Hovercraft log book, respectively in the Airodium log book.

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