

# PŘÍKAZ K ZACHOVÁNÍ LETOVÉ ZPŮSOBILOSTI

**CAA-AD-132/1999**

Datum vydání: 10. prosince 1999

## **VRTULE - VRTULOVÁ HLAVA - KONTROLA/VÝMĚNA**

**Týká se:** vrtulí vyrobených firmou MT-Propeller typu MTV-3, model MTV-3-B, verze MTV-3-B-C, vybavených vrtulovými listy L250-21, všech výrobních čísel.

**Důvod vydání:** objeveny trhliny na vrtulové hlavě, v místě přechodu vrtulový náboj - příruba.

**Datum účinnosti:** 27. ledna 2000.

**Provést v termínech:** Jak je popsáno v LBA AD 1997-006/5 (příloha tohoto PZZ).

**Postup provedení prací:** Dle pokynů v LBA AD 1997-006/5.

*Poznámky: Provedení tohoto PZZ musí být zapsáno do vrtulové knihy. Případné dotazy týkající se tohoto PZZ adresujte na ÚCL technický inspektorát - Ing. Beneš. Pokud to vyžaduje povaha tohoto PZZ musí být zapracováno do příslušné části dokumentace pro obsluhu, údržbu a opravy letadla. Tento PZZ byl vypracován na základě LBA AD 1997-006/5.*

**Ing. Pavel MATOUŠEK**  
**Ředitel technického inspektorátu**  
**Úřad pro civilní letectví**

**LBA AD 97-006**

**MT-Propeller**

**Effective Date:16 January 1997**

**Affected:**

Kind of aeronautical product: Propeller

Manufacturer: MT-Propeller Entwicklung, Atting, Germany

Type: MTV-3

Models affected: MTV-3-B, version MTV-3-B-C equipped with propeller blades L250-21

Serial numbers affected: all

German Type Certificate No.: 32.130/54

**Subject:**

Hub, crack inspection and rework of the propeller-flange and hub transition area.

**Reason:**

On the affected propellers it is possible that cracks occur between hub and propeller-flange as a result of aerobatic flight, if the radius on the transition area is too small. The reason for that is the high stress which occurs during flight under these conditions.

These cracks were detected during overhaul of the propeller types mentioned.

**Action:**

1. Crack inspection of the transition area between hub and propeller-flange by penetrant methods (fluorescent method or red-white-method according to DIN 54152 or MIL-I-6866).
2. These inspections must be repeated in intervals mentioned under "Compliance".
3. Replacement of the hub if any cracks have been found during the required inspections.
4. Modification of the hub corresponding MT-Propeller Service Bulletin no. 12, dated 27 September 1996.

Compliance (for the mentioned actions):

1. Within the next 50 flight hours or until 31 March 1997.
2. Every 100 flight hours or 12 months (modified hubs must be inspected every 12 months or 200 flight hours).
3. Prior to further flight.
4. Until 31 December 1997.

**Technical publication of the manufacturer:**

MT-Propeller Service Bulletin no.12, dated 27 September 1996. This Service Bulletin can be obtained from:

MT-Propeller Entwicklung GmbH

Airport Atting Wallmühle

94348 Atting

Fax-no. 0049 9429 8432

Germany

**Accomplishment and log book entry:**

Action to be accomplished by an approved service station and to be checked and entered in the log book by a licensed inspector.

**LBA AD 97-006/2**

**MT-Propeller**

**Effective Date: 22 May 1997**

**Affected:**

Kind of aeronautical product: Propeller

Manufacturer: MT-Propeller Entwicklung, Atting, Germany

Type: MTV-3

Models affected: MTV-3-B, version MTV-3-B-C equipped with propeller blades L250-21

Serial numbers affected: all

German Type Certificate No.: 32.130/54

**Subject:**

Hub, crack inspection and rework or replacement of the hub.

**Reason:**

Because of the high loads during some aerobatic manoeuvres on the affected propellers it is possible that cracks occur between hub and propeller flange.

These cracks were detected during overhaul of the propeller types mentioned.

**Action:**

1. Crack inspection of the transition area between hub and propeller flange by dye penetrant methods (fluorescent method or red-white-method according to DIN 54152 or MIL Std. I-6866 and MIL Std. I-25135) or eddy current method (according to DIN 54142 or MIL Std.1949A).
2. These inspections must be repeated in intervals mentioned under "compliance".
3. Replacement of the hub if any cracks have been found during the required inspections. These hubs must be replaced by new hubs part no. A-909-A or by modified hubs. Modified hubs must incorporate the modifications required by MT-Propeller Service Bulletin no.12A, dated 7 April 1997.
4. Modification of the hub corresponding to MT-Propeller Service Bulletin no.12A, dated 7 April 1997.

Note: Crack inspection must be performed by an approved service station or the manufacturer. Additionally, an entry in the propeller log book must be done. The personnel must have level 2 qualification per EN 473 or MIL Std. 410E. The modification of the hub must be performed by the manufacturer or an approved service station authorised by the manufacturer.

**Compliance:**

For the listed actions, the following compliance times has been laid down:

1. Within the next 50 flight hours or 4 weeks, whichever occurs first.
2. Every 50 flight hours or 6 months, whichever occurs first.
3. Prior to further flight.
4. During the next inspection of the propeller.

Note: On new hubs with serial numbers 97... and following the required crack inspection must be performed every 200 flight hours or 12 months, whichever occurs first.

**Technical publication of the manufacturer:**

MT-Propeller Service Bulletin No.12A dated 7 April 1997 which becomes herewith part of this AD can be obtained from Messrs.:

MT-Propeller Entwicklung GmbH

Airport Straubing - Wellmühle

94348 Atting/Germany

## **LBA AD 97-006/3**

### **MT-Propeller**

**Effective Date: 20 November 1997**

#### **Affected:**

Kind of aeronautical product: Propeller

Manufacturer: MT-Propeller Entwicklung, Atting, Germany

Type: MTV-3

Models affected: MTV-3-B, version MTV-3-B-C equipped with propeller blades L250-21

Serial numbers affected: all

German Type Certificate No.: 32.130/54

#### **Subject:**

Hub, crack inspection and rework or replacement of the hub.

#### **Reason:**

Because of the high loads during some aerobatic manoeuvres on the affected propellers it is possible that cracks occur between hub and propeller flange.

These cracks were detected during overhaul of the propeller types mentioned.

#### **Action:**

7. Crack inspection of the transition area between hub and propeller flange by dye penetrant methods (fluorescent method or red-white-method according to DIN 54152 or MIL Std. I-6866 and MIL Std. I-25135) or eddy current method (according to DIN 54142 or MIL Std.1949A).

2. These inspections must be repeated in intervals mentioned under "compliance".

3. Replacement of the hub if any cracks have been found during the required inspections. These hubs must be replaced by new hubs part no. A-909-A or by modified hubs. Modified hubs must incorporate the modifications required by MT-Propeller Service Bulletin no. 12A, dated 7 April 1997.

4. Modification of the hub corresponding to MT-Propeller service Bulletin no.12B, dated 17 July 1997.

Note: Crack inspection must be performed by an approved service station or the manufacturer. Additionally, an entry in the propeller log book must be done. The personnel must have level 2 qualification per EN 473 or MIL Std. 410E.

The modification of the hub must be performed by the manufacturer or an approved service station authorised by the manufacturer.

**Compliance:**

For the listed actions, the following compliance times has been laid down:

1. Within the next 50 flight hours or 4 weeks, whichever occurs first. (The compliance time finished 22 June 1997. See AD-issue 97-006/2)
2. every 50 flight hours or 6 months, whichever occurs first.
3. Prior to further flight.
4. During the next inspection of the propeller.

Note: On new hubs when serial numbers 97... and following the required crack inspection must be performed every 200 flight hours or 12 months, whichever occurs first.

**Technical publication of the manufacturer:**

MT-Propeller Service Bulletin No.12B dated 17 July 1997 which becomes herewith part of this AD can be obtained from Messrs.:

MT-Propeller Entwicklung GmbH

Airport Straubing- Wallmühle

94348 Atting/Germany

Tel. + 49 9429 9409 - 0 / Fax + 49 9429 8432 / E-mail: propeller@aol.com

**LBA AD 97-006/4**

**MT-Propeller**

**Effective Date: 23 April 1998**

**Affected:**

Kind of aeronautical product: Propeller

Manufacturer MT-Propeller Entwicklung, Atting, Germany

Type: MTV-3

Models affected: MTV-3-B, version MTV-3-B-C equipped with propeller blades L250-21

Serial numbers affected: all

German Type Certificate No.: 32.130/54

**Subject:**

Hub, crack inspection and rework or replacement of the hub.

**Reason:**

Because of the high loads during some aerobatic manoeuvres on the affected propellers it is possible that cracks occur between hub and propeller flange.

These cracks were detected during overhaul of the propeller types mentioned.

**Action:**

1. Crack inspection of the transition area between hub and propeller flange by dye penetrant methods (fluorescent method or red-white-method according to DIN 54152 or MIL Std. I-6866 and MIL Std. I-25135) or eddy current method (according to DIN 54142 or Mil Std.1949A).
2. These inspections must be repeated in intervals mentioned under "compliance".
3. Replacement of the hub if any cracks have been found during the required inspections. These hubs must be replaced by new hubs part no. A-909-A or by modified hubs. Modified hubs must incorporate the modifications required by MT-Propeller Service Bulletin no.12A, dated 7 April 1997.
4. Modification of the hub corresponding to MT-Propeller Service Bulletin no.12B, dated 17 July 1997.

Note 1: Crack inspection must be performed by an approved service station or the manufacturer. Additionally, an entry in the propeller log book must be done. The personnel must have level 1 qualification per EN 473 or MIL Std. 410E. The modification of the hub must be performed by the manufacturer or an approved service station authorised by the manufacturer.

Note 2: Crack inspection of the modified or new hubs can be done without removing the propeller from the aircraft.

Compliance:

For the listed actions, the following compliance times has been laid down:

1. Within the next 50 flight hours or 4 weeks, whichever occurs first. (The compliance time finished 22 June 1997. See AD-issue 97-006/2)

2. Every 50 flight hours or 6 months, whichever occurs first.
3. Prior to further flight.
4. During the next inspection of the propeller.

Note: On new hubs with serial numbers 97... and following the required crack inspection must be performed every 200 flight hours or 12 months, whichever occurs first.

**Technical publication of the manufacturer:**

MT-Propeller Service Bulletin No.12C dated 04 March 1998 which becomes herewith part of this AD can be obtained from Messrs.:

MT-Propeller Entwicklung GmbH

Airport Straubing - Wallmühle

94348 Atting/Germany

Tel. + 49 9429 9409 - 0 / Fax + 49 9429 8432 / E-mail: propeller@aol.com

**LBA AD 1997-006/5**

**MT-Propeller**

**Effective Date:** 14 January 1999†

**Affected:**

Kind of aeronautical product: Propeller

Manufacturer: MT-Propeller Entwicklung, Atting, Germany

Type: MTV-3

Models affected: MTV-3-B, version MTV-3-B-C equipped with propeller blades L250-21

Serial numbers affected: all

German Type Certificate No.: 32.130/54

**Subject:**

Hub, crack inspection and rework or replacement of the hub.



**Reason:**

Because of the high loads during some aerobatic manoeuvres an the affected propellers it is possible that cracks occur between hub end propeller flange.

These cracks were detected during overhaul of the propeller types mentioned.

**Action:**

1. Crack inspection of the transition area between hub and propeller flange by dye penetrant methods (fluorescent method or red-white-method according to DIN 54152 or MIL Std. I-6866 and MIL Std. I-25135) or eddy current method (according to DIN 54142 or MIL Std. 1949A).
2. These inspections must be repeated in intervals mentioned under "compliance".
3. Replacement of the hub if any cracks have been found during the required inspections. These hubs must be replaced by new hubs part no. A-909-A or by modified hubs.
4. Modification of the hub corresponding to MT-Propeller Service Bulletin no. I2D, dated 08. December 1998.

Note 1: Crack inspection must be performed by an approved service station or the manufacturer. Additionally, an entry in the propeller log book must be done. The personnel must have level 1 qualification per DIN 65450 or MIL Std. 410E. The modification of the hub must be performed by the manufacturer or an approved service station authorised by the manufacturer.

Note 2: Crack Inspection of the modified or new hubs can be done without removing the propeller from the aircraft.

**Compliance:**

For the listed actions, the following compliance times has been laid down:

1. Within the next 50 flight hours or 4 weeks, whichever occurs first. (The compliance time finished 22 June 1997. See AD-issue 97-006/2)
2. Every 50 flight hours or 6 months, whichever occurs first.
3. Prior to further flight if any cracks have been found during the inspections.
4. During the next inspection of the propeller.

Note: On new hubs with serial numbers 97... end following the required crack inspection must be performed every 200 flight hours or 12 months, whichever occurs first.

**Technical publication of the manufacturer:**

MT-Propeller Service Bulletin No.12D dated 08. December 1998 which becomes herewith part of this AD can be obtained from Messrs.:

MT-Propeller Entwicklung GmbH

Airport Straubing - Wallmühle

94348 Atting /Germany

Tel. + 49 9429 9409 - 0 / Fax + 49 9429 8432 / E-mail: propeller@aol.com

