Airworthiness Directive

AD No.: 2022-0134

Issued: 06 July 2022

Note: This 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, or Annex Vb Part ML.A.301, as applicable, 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 Annex Vb Part ML.A.303, as applicable] or agreed with the Authority of the State of Registry [Regulation (EU) 2018/1139, Article 71 exemption].

Design Approval Holder's Name:

MT-PROPELLER ENTWICKLUNG GmbH

Type/Model designation(s):

MTV-( ) Variable Pitch Propellers

Effective Date: 20 July 2022

TCDS Number(s): EASA.P.001, EASA.P.007, EASA.P.008, EASA.P.017, EASA.P.093, EASA.P.096, EASA.P.098, EASA.P.100, EASA.P.104, and Luftfahrt-Bundesamt Germany (LBA) DE 32.130/75

Foreign AD: Not Applicable

Supersedure: None

ATA 61 – Propeller – Blade Lag Screws – Replacement

Manufacturer(s):

MT-Propeller Entwicklung GmbH

Applicability:

MTV-5, MTV-9, MTV-12, MTV-14, MTV-15, MTV-16, MTV-18 and MTV-27 variable pitch propellers, all models, having a serial number (s/n) as mentioned in the ASB, as defined in this AD; and MTV-5, MTV-9, MTV-11, MTV-12, MTV-14, MTV-15, MTV-16, MTV-17, MTV-18, MTV-20 and MTV-27 variable pitch propellers, any model, on which a propeller blade is installed, having an s/n as mentioned in the ASB, as defined in this AD.

These propellers and (single) blades are known to be installed on, but not limited to, the following aeroplanes and powered sailplanes: Aerostar Aircraft Corp. (Piper) PA-60, Airbus Defence & Space (Bölkow) BO 209, American Champion Aircraft (Bellanca) 8GCBC, Aviat Aircraft Inc. A-1 'Husky' and (Pitts) S-1 and S-2, BAE Systems (Operations) Jetstream 3100 and 3200 series, CEAPR (Robin) ATL, DR400 and (Avions Mudry) CAP 232, Cirrus Design Corporation SR20 and SR22, Commander Aircraft Corporation (Rockwell) 112 and 114, DAHER Aerospace (SOCATA) Rallye 235 and TBM700, Diamond Aircraft Industries DA 40, DA 42 and DA 50, EXTRA EA 300, Fournier RF, General Atomics Aerotec Systems Dornier 228, Grob Aircraft SE G 120, Leonardo Aircraft (SIAI Marchetti) SF260TP, LIFTIFY UG (XtremeAir) XA42, Mitsubishi Heavy Industries MU-2, Mooney Aviation Company M20, M7

Aerospace (Fairchild, Swearingen) SA227, Pilatus PC-12, Piper PA-24, PA-28, PA-31, PA-31T, PA-34, PA-42 and PA-46, REVO Inc. (Lake) LA 4-200, Textron Aviation Inc. (Reims Aviation) F172, FR172, F182 and F337, Textron Aviation Inc. (Cessna) 172, 172RG, R172, 175, 180, 182, 185, 206, 210, 337, 340 and 400 series, (Beechcraft) 33, 35, 36, 55, 90 and 200 series, True Flight Holdings LLC (Grumman, American) AA-5B and ZLIN Aircraft Z-242-L.
These propellers and (single) blades may have been installed on the production line of the aeroplane, or in-service by Supplemental Type Certificate, or by field modification during repair or overhaul.

Definitions:

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

The ASB: MT-Propeller Alert Service Bulletin (ASB) No. 30 Revision 7.

Affected part: Blade lag screws, having P/N A-983-**C**-85, if installed on a propeller or blade, having an s/n as mentioned in the ASB.

Serviceable part: Blade lag screws, having P/N A-983-**D**-85, or P/N A-983-**E**-85.

Reason:

In 2014, it was discovered that a batch of non-conforming propeller blade lag screws had been manufactured with an improper surface finish, which also results in a reduced fatigue strength of these screws.

Further investigation revealed, that these non-conforming lag screws have possibly been installed on the blades of most of the (new) propellers manufactured during the period November 2013 to October 2014 (inclusive), and on certain propellers and single blades that have been overhauled or repaired by MT-Propeller or an MT-Propeller approved Service Centre during the same period.

Prompted by these findings, MT-Propeller issued Service Bulletin (SB) No. 30 (original issue, later revised), identifying the s/n of all propellers and single blades that are possibly affected, and providing instructions to replace these blade lag screws with serviceable screws.

This condition, if not corrected, could lead to in-flight blade detachment, possibly resulting in damage to, and reduced control of, the aeroplane.

To address this potential unsafe condition, MT-Propeller issued the ASB, as defined in this AD, incorporating an updated list of the s/n of all the affected propellers and single blades.

For the reasons described above, this AD requires replacement of all affected parts with serviceable parts.

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

Required as indicated, unless accomplished previously:

Replacement:

(1) Within the compliance time defined in Table 1, as applicable, replace all affected parts with serviceable parts in accordance with the instructions of the ASB.

Table 1 – Replacement of Propeller Blade Lag Screws

Engine(s)	**Compliance Time** (calendar time or flight hours (FH), whichever occurs first after the effective date of this AD)
Turboprop	Within 4 months or 50 FH
Piston	Within 2 months or 25 FH

Credit:

(2) Replacement of all affected parts on a propeller or blade, accomplished before the effective date of this AD in accordance with the instructions of MT-propeller (Alert) SB No. 30 at Revision 6 or earlier revisions, is an acceptable method to comply with the requirements of paragraph (1) of this AD for that propeller or blade, as applicable.

Parts Installation:

(3) From the effective date of this AD, it is allowed to install on any propeller or single blade, as applicable, blade lag screws, provided these are serviceable parts, as defined in this AD.

Ref. Publications:

MT-Propeller ASB No. 30 Revision 7 dated 23 June 2022.

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. Based on the required actions and the compliance time, EASA have decided to issue a Final AD with Request for Comments, postponing the public consultation process until after publication.

3. Enquiries regarding this AD should be referred to the EASA Safety 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 aircraft 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: MT-Propeller Entwicklung GmbH, Flugplatzstraße 1, 94348 Atting, Germany; Telephone: +49-(0)9429-94090 or E-mail: techsupport@mt-propeller.com, or MT-Propeller USA, Inc., 1180 Airport Terminal Drive, DeLand, FL 32724, USA; Telephone: (386) 736-7762 or E-mail: service@mt-propellerusa.com.