
Type Acceptance Report

TAR 16/21B/14

MTV-21 Propeller

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Executive Summary

New Zealand Type Acceptance has been granted to the MTV-21 Series propeller based on validation of LBA Type Certificate number 32.130/86. There are no special requirements for import.

Applicability is limited to the Models and/or serial numbers detailed in Appendix 1, which are now eligible for installation on a NZ-registered aircraft. Additional variants or serial numbers approved under the foreign type certificate can become type accepted after supply of the applicable documentation, in accordance with the provisions of NZCAR §21.43(c).

NOTE: The information in this report is correct as at the date of issue. The report is only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest applicable ICAO Type Certificate Data Sheet.

1. Introduction

This report details the basis on which Type Acceptance Certificate No.16/21B/14 was granted in the Standard Category in accordance with NZCAR Part 21 Subpart B.

Specifically the report aims to:

- (a) Specify the foreign type certificate and associated airworthiness design standard used for type acceptance of the product in New Zealand; and
- (b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate.

2. ICAO Type Certificate Details

Manufacturer: MT-Propeller Entwicklung GmbH

Type Certificate: LBA 32.130/86
Issued by: German Lufthahrt-Bundesamt

Model(s): MTV-21-A, MTV-21-D, MTV-21-F

3. Type Acceptance Details

The application for New Zealand type acceptance was originally part of type acceptance of the Tecnam P2006T aircraft in May 2010. This exercise was not completed until December 2015 so the type acceptance of the MTV-21 propeller was separated out.

The MTV-21 is a 2-blade variable pitch propeller with hydraulically operated pitch change mechanism which provides for “Constant Speed”, “Feather” and “Reverse” modes. The hub is aluminium and the blades are laminated wood with composite covering.

Type Acceptance Certificate No. 16/21B/14 was granted on 10 July 2010 to the MTV-21 Series propeller based on validation of LBA Type Certificate number 32.130/86. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

4. NZCAR §21.43 Data Requirements

The type data requirements of NZCAR Part 21B Para §21.43 have been satisfied by supply of the following documents, or were already held by the CAA:

(1) ICAO Type certificate:

LBA Type Certificate Number 32.130/86

LBA Type Certificate Data Sheet number 32.130/86 at Issue 5 dated 17 June 2004
– Models MTV-21-A, MTV-21-D, MTV-21-F approved 10 June 1993

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The certification basis of the MTV-21 propeller series is FAR Part 35 with amendments 35-1 through 35-7. This is an acceptable certification basis in accordance with NZCAR Part 21B Paragraph §21.41 and Advisory Circular 21-1A, as FAR Part 35 is the basic airworthiness standard for propellers called up under Part 21 Appendix C. There are no non-compliances and no additional special conditions have been prescribed by the Director under §21.23.

(ii) *Special Conditions:*

Nil

(iii) *Equivalent Level of Safety Findings:*

Nil

(iv) *Airworthiness Limitations:*

See the Airworthiness Limitations Section in the applicable Operation and Installation Manual.

(3) Environmental Certification:

Nil

(4) Certification Compliance Listing:

MTV Form E-161 Ref I-EC-34 Compliance Checklist MTV-21 dated 30-3-93
(FAR 35 Amdt 5) – in German.

MTV Form E-161 Ref I-EC-34 Compliance Checklist MTV-21 dated 1-9-94 (FAR 35 amdt 5) – in German.

MTV Form E-161 Ref I-EC-34 Compliance Checklist MTV-21 dated 26-8-96
(FAR 35 amdt 6) – in German.

MTV Report E-686 – Type Investigations MTV-21, Issue 3 dated 27-4-04. (FAR 35 at amdt 7) – in English and German.

- (5) Flight Manual: N/A
- (6) Operating Data for Propeller:
 - (i) *Maintenance Manual:*
 - E-124 – Operation and Installation Manual – Hydraulically Controlled Variable Pitch Propeller

 - E-504 – Operation and Installation Manual – Reversible Hydraulically Controlled Variable Pitch Propeller
 - (ii) *Current service Information:*
 - Service Bulletins
 - (iii) *Illustrated Parts Catalogue:*
 - E-220 – Overhaul Manual and Parts List – Hydraulically Controlled Variable Pitch Propeller

 - E-519 – Overhaul Manual and Parts List – Reversible Hydraulically Controlled Variable Pitch Propeller
- (7) Agreement from manufacturer to supply updates of data in (5), and (6):
 - CAA 2171 Form from MT-Propeller Certification Engineering dated 08.07.2014
- (8) Other information:
 - Nil

Attachments

The following documents form attachments to this report:

Copy of LBA Type Certificate Data Sheet Number 32.130/86

Sign off

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Peter Gill
Team Leader Design

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Checked – David Gill
Team Leader Airworthiness

Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
MTV-21 Series	MT-Propeller Entwicklung GmbH	16/21B/14	10 July 2010