
Type Acceptance Report

TAR 9/21B/2

MTV-16-1 Propeller

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1. INTRODUCTION	1
2. ICAO TYPE CERTIFICATE DETAILS	1
3. TYPE ACCEPTANCE DETAILS	1
4. NZCAR §21.43 DATA REQUIREMENTS	2
ATTACHMENTS	3
APPENDIX 1	3

Executive Summary

New Zealand Type Acceptance has been granted to the MTV-16-1 propeller based on validation of EASA Type Certificate number P.001. 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).

1. Introduction

This report details the basis on which Type Acceptance Certificate No.9/21B/2 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: EASA P.001

Issued by: European Aviation Safety Agency

Model(s): MTV-16-1

3. Type Acceptance Details

The application for New Zealand type acceptance was from the manufacturer, dated 28 July 2008. The MTV-16-1 is a 4-blade variable pitch propeller with hydraulically operated pitch change mechanism and a range of reversing systems to suit various turbine engines. The hub is aluminium and the propeller blades are either laminated wood with composite covering or aluminium.

Type Acceptance Certificate No. 9/21B/2 was granted on 8 August 2008 to the MTV-16-1 propeller based on validation of EASA Type Certificate number P.001. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

The first application of the propeller on a NZ-registered aircraft was on the PAC 750XL, in accordance with STC Number EASA.A.S.03481. This was validated in New Zealand under CAA Work Request number 9/ACM/11.

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:

EASA Type Certificate Number P.001

EASA Type Certificate Data Sheet number P.001 at Issue 02 dated 15 May 2007

– Model MTV-16-1 (wooden blades) approved 24 August 2004

– Model MTV-16-1 (aluminium blades) approved 15 May 2007

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The certification basis of the MTV-16 is JAR-P Change 7 dated October 22, 1987, as modified by Amendment P/96/1 of August 8, 1996, CS-P 390 Amendment No. P/1, and CS-P 400 Amendment No. P/1. This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.41 and Advisory Circular 21-1A, as CS-P is the successor of JAR-P, the European equivalent of FAR Part 35 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 Service Bulletin No.1AF for recommended overhaul intervals

(3) Environmental Certification:

Nil

(4) Certification Compliance Listing:

Certification Record Document E-1126 – Propeller MTV-16-1 Type Investigations

– Major Change of Type Certification – Issue No.7 dated 07 May 2008

(5) Flight Manual: N/A

(6) Operating Data for Propeller:

(i) *Maintenance Manual:*

E-610 – Operation and Installation Manual for reversible hydraulically controlled variable pitch propeller; Reverse-Systems (G), (P), (W), (A)

E-809 – Overhaul Manual for Metal Blades

E-1083 – Operation and Installation Manual for reversible hydraulically controlled variable pitch propeller MTV-16-1, MTV-27-2 for PT6A-67A

(ii) *Current service Information:*
Service Bulletins

(iii) *Illustrated Parts Catalogue:*
E-680 – Overhaul Manual and Parts List for reversible hydraulically controlled variable pitch propeller; Reverse-Systems (G), (P), (W), (A)

(7) Agreement from manufacturer to supply updates of data in (5), and (6):

See email from MT-Propeller Flight Test/Certification Engineering dated 06/08/08

Attachments

The following documents form attachments to this report:

Copy of EASA Type Certificate Data Sheet Number EASA P.001

Sign off

.....
David Gill
Team Leader Airworthiness

.....
Checked – Chris Thomson
Airworthiness Engineer

Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
MTV-16-1	MT-Propeller Entwicklung GmbH	9/21B/2	8 August 2008