

European Aviation Safety Agency

EASA

TYPE-CERTIFICATE DATA SHEET

EASA.A.576

P2010

Costruzioni Aeronautiche TECNAM S.r.I.

Via Tasso, 478 80127 Napoli ITALIA

Issue 01: 26 Sept 2014 Issue 02: 05 May 2015 Issue 03: 16 Dec 2015 Issue 04: 22 Dec 2016 Issue 05: 29 March 2018

CONTENT

SECTION A: P2010

- A.I. General
- A.II. Certification Basis
- A.III. Technical Characteristics and Operational Limitations
- A.IV. Operating and Service Instructions
- A.V. Notes

ADMINISTRATIVE SECTION

- I. Acronyms
- II. Type Certificate Holder Record
- III. Change Record

SECTION A: P2010

A.I. General

1. Data Sheet No.: EASA.A.576

2. a) Type: P2010

3. Airworthiness Category: CS-23 Normal category

4. Type Certificate Holder: Costruzioni Aeronautiche Tecnam S.R.L.

Via Tasso, 478 80127 Napoli

ITALIA

5. Manufacturer: Costruzioni Aeronautiche Tecnam S.R.L.

Via Tasso, 478 80127 Napoli

ITALIA

6. Certification Application

Date:

15 September 2010

7. (Reserved) National

Certifying Authority

8. (Reserved) National Authority Type Certificate

Date:

N/A

N/A

A.II. EASA Certification Basis

1. Reference Date for

determining the applicable

requirements:

15 September 2010

2. Airworthiness Requirements: EASA CS-23 amdt.2 dated 28 September 2010

EASA CS-ACNS

3. Special Conditions: CRI B-52 (SC-B23.div-01 Human Factors –

Integrated Avionic System);

CRI F-101 (SC-F23-1309-02 Protection from the

Effect of HIRF);

CRI F-54 (SC-F23-1309-03 Protection from the Effects of Lightning Strike, Indirect Effects); CRI F-58 (SC-F23.1353-02 Lithium Battery

Installations)

3. Exemptions: None

4. Deviations: None

5. Equivalent Safety Findings: None

6. Requirements elected to

comply:

EASA CS-23 amdt.4 para. 23.1306

EASA CS-23 amdt.4 para. 23.1308

7. Environmental Standards: CS-36 amdt. 2 dated 31 August 2009, subpart C

with reference to ICAO Annex 16, Volume 1, Chapter 10, amdt. 9 dated 30 July 2009.

8. (Reserved) Additional National Requirements:

N/A

9. (Reserved) N/A

10. Operational Suitability OSD MMEL: CS-GEN-MMEL, Initial Issue dated 31

Requirements January 2014

A.III. <u>Technical Characteristics and Operational Limitations</u>

1. Type Design Definition: Document no. 2010/010 "Type Design Definition"

2. Description:

2.1 Basic: Single-engine, fixed pitch propeller, four seats, high

wing aeroplane equipped with fixed tricycle landing gear, featuring composite, aluminium and steel

construction.

2.2 Optional Single-engine, variable pitch propeller, four seats, high

wing aeroplane equipped with fixed tricycle landing

gear, featuring composite, aluminium and steel

construction.

3. Equipment: Equipment list, AFM, doc. No. 2010/100, Section 6

4. Dimensions:

(see note 1,3)

Span 10.30 m (33.79 ft)

Length 7.97 m (26.15 ft)

Height 2.64 m (8.66 ft)

Wing Area 13.9 m² (149.6 ft²)

5. Engine:

5.1 Basic

5.1.1 Model: No.1 Lycoming Engines: IO-360-M1A

5.1.2 Type Certificate: EASA Type Certificate No. EASA.IM.E.032

5.1.3 Limitations

(see note 1)

5.1.3.1 Basic: Take-Off Power 134 kW (180HP) at 2700 RPM

Max continuous power 134 kW (180HP) at 2700 RPM

Other engine's limitations are listed in doc. No. 2010/100 "P2010 Aircraft Flight Manual", Section 2

5.1.3.2 Optional Take-Off Power 134 kW (180HP) at 2700 RPM

Take On Tower To The (Tooth) at 2700 Th W

Max continuous power 129 kW (173HP) at 2600 RPM

Other engine's limitations are listed in doc. No. 2010/100 "P2010 Aircraft Flight Manual", Section 2

5.2 Optional (see note 3)

5.2.1 Model: No.1 Lycoming Engines: IO-390-C3B6

5.2.2 Type Certificate: EASA Type Certificate No. EASA.IM.E.097

5.2.3 Limitations

5.2.3.1 Basic: Take-Off Power 160.3 kW (215HP) at 2700 RPM

Max continuous power 160 kW (215HP) at 2700 RPM

Other engine's limitations are listed in doc. No. 2010/100 "P2010 Aircraft Flight Manual", Section 2

6. Load factors: Flap UP Flap DOWN

Positive +3.8 g +2.0 g Negative -1.52 g 0.0 g

7. Propeller:

7.1 Basic:

7.1.1 Model: MT Propeller: MT 188 R 145-4G

7.1.2 Type Certificate: EASA Type Certificate No. EASA.P.006

7.1.3 Number of blades: 2

7.1.4 Diameter: 1.880 m (74 in) – No reduction is permitted

7.1.5 Sense of Rotation: Clockwise (pilot's view)

7.2 Optional 1:(see note 1)

7.2.1 Model: MT Propeller: MTV-15-B/193-52

7.2.2 Type Certificate: EASA Type Certificate No. EASA.P.098

7.2.3 Number of blades: 2

7.2.4 Diameter: 1.930 m (76 in) – No reduction is permitted

7.2.5 Sense of Rotation: Clockwise (pilot's view)

7.3 Optional 2:(see note 3)

7.3.1 Model: MT Propeller: MTV-12B/183-59

7.3.2 Type Certificate: EASA Type Certificate No. EASA.P.013

7.3.3 Number of blades: 3

7.3.4 Diameter: 1.830 m (72 in) – No reduction is permitted

7.3.5 Sense of Rotation: Clockwise (pilot's view)

8.1 Fuel: AVGAS Grade 91/96 or 100 LL (ASTM D910) (see note 3)

MOGAS EN 228 (E) (see note 2)

Refer to doc. No. 2010/100 "P2010 Aircraft flight

Manual" for further details.

| 8.2 Oil: | Average Ambient Temperature | MIL-L-6082B or SAEJ1966 Spec. Mineral Grades | MIL-L-22851 or SAEJ1899 Spec. Ashless Dispersant Grades |
|----------|-----------------------------------|---|--|
| | All Temperatures | | SAE15W50 or SAE20W-50 |
| | Above 80°F | SAE60 | SAE60 |
| | Above 60°F | SAE50 | SAE40 or SAE50 |
| | 30°F to 90°F | SAE40 | SAE40 |
| | 0°F to 70°F | SAE30 | SAE40, SAE30, SAE20W40 |
| | Below 10°F | SAE20 | SAE30 or SAE20W30 |

Refer to Lycoming (L)IO-360-M1A "Operation and Installation Manual" and Lycoming (L)IO-390-C1B3 "Operation and Installation Manual" for list of alternative recommended commercial brands and types.

| _ | | | | | |
|----|------------------|------|-----|-----|--------|
| a | — ⊢ I i i | 14 1 | าวก | - | י אסול |
| 9. | ı ıu | ıu (| Jav | auı | ties: |
| | | | | | |

| 9.1 Fuel: | 2 Tanks: Total: Usable: | 120 litres each (31.7 U 240 litres (63.4 US gallo 231 litres (61 US gallo | lons) |
|-------------------------|------------------------------------|---|----------|
| 9.2.1 Oil: | Total: Minimum: | 7.57 litres (8 US qts) 3.78 litres (4 US qts) | |
| 9.2.2 Oil (see note 3): | Total: Minimum: | 6.62 litres (7 US qts) 1.89 litres (2 US qts) | |
| 10. Air Speeds: | Never exceed speed V _{NE} | | 164 KCAS |
| | Maximum Structu | ral Cruising Speed V _{NO} | 130 KCAS |
| | Design Manoeuvr | ing speed V _A | 119 KCAS |
| | Operating Manoeuvring speed Vo | | 119 KCAS |
| | Maximum flaps ex | tended speed V _{FE} | 92 KCAS |
| 44 Marriagna On anatica | 12000 f f | | |

11. Maximum Operating 12000 ft Altitude:

12. Allweather Operations

Capability:

Day/Night-VFR, IFR;

Refer to KOEL contained in the AFM, doc. No.

2010/100, Section 2.

Flight into expected or actual icing conditions is

prohibited

13. Maximum Weights: Max Take-Off: 1160 kg (2557 lb)

Max Landing:

1160 kg (2557 lb)

14. Centre of Gravity

Range:

Forward Limit: 0.262 m (19% MAC) behind datum

Aft Limit: 0.440 m (32% MAC) behind datum Mean Aerodynamic Chord is 1.378 m (54.2 in)

15. Datum:

Vertical plane tangent to wing leading edge

16. Control surface deflections:

Stabilator: 17°±2° to pitch up / 6°±2° to pitch down

Stabilator Trim Tab: 15 ±1° downward / 3°±1° upward Aileron: 19°±2° upward / 14°±2° downward

Rudder: 25°±2° left / 25°±2° right

Rudder Trim Tab: 20°±2° left / 20° ±2° right

Flaps: 0° Fully Retracted / 40°±1° Fully Extended

seat track supporting beams (see procedure in doc. 17. Levelling Means:

No. 2010/100 "P2010 Aircraft Flight Manual", Section

6)

1 18. Minimum Flight Crew:

19. Maximum Passenger

Seating Capacity:

3

20. Baggage/Cargo Max Allowable Load: 40 kg (88 lb) Compartments:

Location: 1.56 m (61.41 in) from datum

21. Wheels and Tyres: Nose Wheel Tyre Size: 5.00-5, Type III

> Main Wheel Tyre Size 6.00-6, Type III

For approved Types and rating see AMM, doc No.

2010/101

22. Serial Numbers Eligible: 002 to subsequent

A.IV. Operating and Service Instructions

1. Flight Manual: Doc. No. 2010/100 "P2010 Aircraft Flight Manual"

Last issue.

2. Technical Manual: Doc. No. 2010/101 "P2010 Aircraft Maintenance

Manual" Last issue;

Airworthiness Limitations are reported in ATA

chapter 4.

3. Spare Parts Catalogue: Doc. No. 2010/102 "P2010 Illustrated Parts

Catalogue" Last issue.

4. Instruments and aggregates: Doc. No. 2010/101 "P2010 Aircraft Maintenance

Manual" Last issue.

A.V. Operational Suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Aviation Safety Agency under the EASA Type Certificate EASA.A.576 as per Commission Regulation (EU) 748/2012 as amended by Commission Regulation (EU) No 69/2014.

1. Master Minimum Equipment List (MMEL)

The MMEL is defined in the P2010 GEN.MMEL, Report n°2010/164, Revision 0 or later approved revisions.

A.V. Notes:

- 1) When MOD 2010/002 (EASA approval 10052750) is installed
- 2) When MOD 2010/032 (EASA approval 10055692) is installed
- 3) When MOD 2010/078 (EASA approval 10065113) is installed

ADMINISTRATIVE SECTION

I. Acronyms

AFM - Aircraft Flight Manual

AMM – Aircraft Maintenance Manual

ASTM – American Society for Testing and Materials

CRI - Certification Review Item

CS - Certification Specification

EASA - European Aviation Safety Agency

ICAO - International Civil Aviation Organization

IPC - Illustrated Part Catalogue

KCAS – Knots Calibrated Air Speed

KOEL – Kind of Operations Equipment List

MAC - Mean Aerodynamic Chord

MLW - Maximum Landing Weight

MTOW – Maximum Take-Off Weight

MZFW - Maximum Zero Fuel Weight

TC – Type Certificate

TCDS - Type Certificate Data Sheet

VFR - Visual Flight Rules

IFR - Instrumental Flight Rules

II. Type Certificate Holder Record

| TC Holder | Period |
|--|-----------|
| Costruzioni Aeronautiche TECNAM S.r.l. | Effective |
| Via Tasso, 478 | |
| 80127 Napoli | |
| ITALIA | |

III. Change Record

| Issue | Date | Changes | TC Issue No. & Date |
|----------|------------------|--|---------------------|
| Issue 01 | 26 Sept 2014 | Initial Issue | 26 Sept 2014 |
| Issue 02 | 05 May 2015 | MT Variable Pitch Propeller Added | |
| Issue 03 | 16 Dec 2015 | Update to include changes: MOD2010/001 "GFC 700 autopilot" (EASA approval 10055187), MOD2010/003 "Alternative avionics configuration" (EASA approval 10053996), MOD2010/032 Automobile fuel (EASA approval 10055692) | |
| Issue 04 | 22 Dec 2016 | Introduction of OSD MMEL. CRI F-102 (and corresponding note 3) has been removed since it is not a special condition | |
| Issue 05 | 29 March 2018 | Amended to include change MOD2010/078 (EASA approval 10065113) | |