# **European Aviation Safety Agency**



## TYPE CERTIFICATE

#### **EASA.A.576**

This Type Certificate is issued by EASA, acting in accordance with Regulation (EC) No. 216/2008 on behalf of the European Community, its Member States and of the European third countries that participate in the activities of EASA under Article 66 of that Regulation and in accordance with Commission Regulation (EC) No. 748/2012 to

# COSTRUZIONI AERONAUTICHE TECNAM S.R.L.

VIA TASSO 478 80127 NAPOLI NA ITALY

and certifies that the product type design listed below complies with the applicable Type Certification Basis and environmental protection requirements when operated within the conditions and limitations specified on the associated:

Type Certificate Data Sheet Number: EASA.A.576

**Type Design - Model** 

Date of Issue

P2010

26 September 2014

For the European Aviation Safety Agency,

Date of issue: 26 September 2014

Yves MORIER

Head of General Aviation and Remotely Piloted Aircraft Systems (RPAS)



# **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: 15 Dec 2015

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## 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** 

N/A

6. Certification Application

Date:

15 September 2010

7. (Reserved) National

Certifying Authority

N/A

8. (Reserved) National Authority Type Certificate

Date:

#### 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

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)

CRI F-102 (ESP and USP) (see note 3)

3. Exemptions: None

4. Deviations: None

5. Equivalent Safety Findings: None

6. Requirements elected to

comply:

None

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

#### A.III. Technical Characteristics and Operational Limitations

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)

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 m<sup>2</sup> (149.6 ft<sup>2</sup>)

5. Engine:

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

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

(see note 1) 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

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:

(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

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

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

MOGAS EN 228:2008 (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)LIO-360-M1A "Operation and Installation Manual" for list of alternative recommended commercial brands and types.

9. Fluid capacities:

9.1 Fuel: 2 Tanks: 120 litres each (31.7 US gallons)

Total: 240 litres (63.4 US gallons)

Usable: 231 litres (61 US gallons)

9.2 Oil: Total: 7.57 litres (8 US qts)

Minimum: 3.78 litres (4 US qts)

10. Air Speeds: Never exceed speed V<sub>NF</sub> 164 KCAS

Maximum Structural Cruising Speed V<sub>NO</sub> 130 KCAS

Design Manoeuvring speed V<sub>A</sub> 119 KCAS

Operating Manoeuvring speed V<sub>O</sub> 119 KCAS

Maximum flaps extended speed V<sub>FE</sub> 92 KCAS

11. Maximum Operating

Altitude:

12000 ft

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

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

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

6)

18. Minimum Flight Crew: 1

19. Maximum Passenger

Seating Capacity:

Compartments:

20. Baggage/Cargo

Max Allowable Load: 40 kg (88 lb)

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

3

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. Notes:

- 1) When MOD 2010/002 (EASA approval 10052750) is installed
- 2) When MOD 2010/032 (EASA approval 10055692) is installed
- 3) When MOD 2010/001 (EASA approval 10055187) 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	15 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)	