EASA

TYPE-CERTIFICATE DATA SHEET

EASA.A.576

P2010

Costruzioni Aeronautiche TECNAM S.P.A.

Via S. D'acquisto, 62
80042 Boscotrecase, 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
Issue 06: 25 March 2019
Issue 07: 23 May 2019
Issue 08: 20 Dec 2019
Issue 09: 07 Aug 2020
Issue 10: 08 Oct 2020

CONTENT

SECTION A: P2010

A.I. General

1. Data Sheet No.:	EASA.A.576
2. a) Type:	P2010
b) Model:	P2010
c) Variant:	--_
3. Airworthiness Category:	CS-23 Normal category
4. Type Certificate Holder:	Costruzioni Aeronautiche Tecnam S.p.A. Via Salvo D'acquisto 62 80042 Boscotrecase, Napoli ITALIA
5. Manufacturer:	see Note 5
6. Certification Application Date:	15 September 2010
7. (Reserved) National Certifying Authority	N/A
8. (Reserved) National Authority Type Certificate Date:	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 Requirements	OSD MMEL: CS-GEN-MMEL, Initial Issue dated 31 January 2014

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 (see note 1,3)	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:	
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^2 (149.6 ft^2)
5. Engine:	
5.1 Basic	
5.1.1 Model:	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 (see note 1)	Take-Off Power 134 kW (180HP) at 2700 RPM 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:	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 ( ) (see note 6)

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 ( ) (see note 6)

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. Fluids

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.

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)

9.2.1 Oil:
Total: 7.57 litres (8 US qts)
Minimum: 3.78 litres (4 US qts)

9.2.2 Oil (see note 3):
Total: 6.62 litres (7 US qts)
Minimum: 3.78 litres (4 US qts)

10. Air Speeds:

Never exceed speed V_{NE}	164 KCAS
Maximum Structural Cruising Speed V_{NO}	130 KCAS
Design Manoeuvring speed V_A	119 KCAS
Operating Manoeuvring speed V_O	119 KCAS
Maximum flaps extended speed V_{FE}	92 KCAS

11. Maximum Operating Altitude:
12000 ft
14000 ft (see note 7)

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 Stabilator Trim Tab: 6 ±1° downward / 3°±1° upward (see note 4) 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:	3
20. Baggage/Cargo Compartments:	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
22. Serial Numbers Eligible:	See Note 5

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 Union 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.VI. 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
4) When MOD 2010/133 (EASA approval 10069356) is installed
5) Manufacturer's eligible serial numbers:
   - s/n 002 to subsequent for a/c manufactured by C.A. Tecnam S.P.A. under certificate EASA production certificate IT.21G.0032,
   - s/n CP-001 to subsequent for a/c manufactured by LUSY Co. LTD under certificate CAAC production certificate PC0034A-DB

   The aircraft s/n CP-001 to subsequent can be delivered in China (including Hong Kong, Macao and Taiwan), Mongolia, North Korea & Pakistan and cannot be registered in Europe.
6) As per Manufacturer TCDS, propellers with designation having a "small" letter in the place of the brackets (for example "MTV-14-B-C-F/CF 195-30x") may be installed since it does not affect interchangeability. A capital letter in the place of the bracket (for example MTV-14-B-C-F/CF 195-30X) may not be installed according to propeller TCDS since it may affect interchangeability
7) When MOD 2010/194 (EASA approval 10073987) and MOD2010/078 (EASA approval 10065113) are installed

SECTION B: P2010 TDI

B.I. General

1. Data Sheet No.:	EASA.A.576
2. a) Type:	P2010
b) Model:	P2010 TDI
c) Variant:	--_
3. Airworthiness Category:	CS-23 Normal category
4. Type Certificate Holder:	Costruzioni Aeronautiche Tecnam S.p.A. Via Salvo D'acquisto 62 80042 Boscotrecase, Napoli ITALIA
5. Manufacturer:	see Note 5
6. Certification Application Date:	29 April 2019
7. (Reserved) National Certifying Authority	N/A
8. (Reserved) National Authority Type Certificate Date:	N/A

B.II. EASA Certification Basis

1. Reference Date for determining the applicable requirements:	29 April 2019
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-58 (SC-F23.1353-02 Lithium Battery Installations) CRI E-103 (para.1) Installation of the diesel engine TAE 125-02 CRI E-104 (SC-CS-23.1305- Fuel low level annunciation means)
3. Exemptions:	None
4. Deviations:	None
5. Equivalent Safety Findings:	CRI E-103 (para.3) Installation of the diesel engine TAE 125-02
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. 5 reference to ICAO Annex 16, Volume I, 8th Edition, July 2017
8. (Reserved) Additional National Requirements:	N/A

9. (Reserved)	N/A
10. Operational Suitability Requirements	OSD MMEL: CS-GEN-MMEL, Initial Issue dated 31 January 2014

A.III. Technical Characteristics and Operational Limitations

1. Type Design Definition: Document no. 2010/637 “Type Design Definition”
2. Description:
   2.1 Basic: 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. 2010/552, Section 6
4. Dimensions:

Span	10.30 m (33.79 ft)
Length	7.91 m (25.95 ft)
Height	2.84 m (9.32 ft)
Wing Area	13.9 m^2 (149.6 ft^2)

5. Engine:
   5.1 Basic
   5.1.1 Model: Continental Engines: TAE 125-02-125
   5.1.2 Type Certificate: EASA Type Certificate No. EASA.E.055
   5.1.3 Limitations: Take-Off Power 125 kW (168HP) at 2300 RPM
   Max continuous power 114 kW (153HP) at 2250 RPM
   Other engine’s limitations are listed in doc. No. 2010/552 “P2010 TDI 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: MTV-6-R /190-69
   7.1.2 Type Certificate: EASA Type Certificate No. EASA.P.094
   7.1.3 Number of blades: 3
   7.1.4 Diameter: 1.900 m (75 in) – No reduction is permitted
   7.1.5 Sense of Rotation: Clockwise (pilot’s view)

8. Fluids

8.1 Fuel:	JET A-1 (ASTM –D-1655) Diesel (EN 590) Refer to doc. No. 2010/552 “P2010 TDI Aircraft Flight Manual” for further details.
8.2 Oil: Engine	Aero Shell Oil Diesel Ultra, Shell Helix Ultra 5W30 or see applicable AFM, Section 2.
Gearbox	Centurion Gearbox Oil N1, or see applicable AFM, Section 2
8.3 Coolant	Water / Cooler Protection for more details see applicable AFM, Section 2
8.4 Ice Protection Fluids:	Liqui Moly "Diesel Fliess-Fit” or see applicable AFM, Section 2

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:	6 litres (6.34 US qts)
	Minimum:	4.5 litres (4.75 US qts)

10. Air Speeds:	Never exceed speed V_{NE}	164 KCAS
	Maximum Structural Cruising Speed V_{NO}	130 KCAS
	Design Manoeuvring speed V_A	119 KCAS
	Operating Manoeuvring speed V_O	119 KCAS
	Maximum flaps extended speed V_{FE}	92 KCAS LND 101 KCAS TO
11. Maximum Operating Altitude:	18000 ft	
12. All-weather Operations Capability:	Day/Night-VFR, IFR; Refer to KOEL contained in the AFM, doc. No. 2010/552, 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: 0.275 m (19% MAC) behind datum up to 1000Kg 0.330 m (23% MAC) behind datum up to MTOW	

	Aft Limit: 0.454 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: 8 ±2° downward / 6°±2° 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. 2010/552 “P2010 TDI Aircraft Flight Manual”, Section 6)
18. Minimum Flight Crew:	1
19. Maximum Passenger Seating Capacity:	3
20. Baggage/Cargo Compartments:	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. 2010/553
22. Serial Numbers Eligible:	See Note 5

B.IV. Operating and Service Instructions

5. Flight Manual:	Doc. No. 2010/552 “P2010 TDI Aircraft Flight Manual” Last issue.
6. Technical Manual:	Doc. No. 2010/553 “P2010 TDI Aircraft Maintenance Manual” Last issue; Airworthiness Limitations are reported in ATA chapter 4.
7. Spare Parts Catalogue:	Doc. No. 2010/638 “P2010 TDI Illustrated Parts Catalogue” Last issue.
8. Instruments and aggregates:	Doc. No. 2010/553 “P2010 Aircraft Maintenance Manual” Last issue.

B.V. Operational Suitability Data (OSD)

The Operational Suitability Data elements listed below are approved by the European Union 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.

B.VI. Notes:

5) Manufacturer's eligible serial numbers:

- S/N 100 to subsequent (when MOD2010/162 is installed - EASA approval 10074522) for A/C manufactured by C.A. Tecnam S.P.A. under certificate EASA production certificate IT.21G.0032,

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 Union 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.p.A. Via Salvo D'acquisto 62 80042 Boscotrecase, Napoli ITALIA	Effective

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)	
Issue 06	25 March 2019	Amended to include change MOD2010/133 (EASA approval 10069356), remove typos and update company business registration.	
Issue 07	23 May 2019	Added Chinese manufacturer, updated eligible s/n and Company address	
Issue 08	20 Dec 2019	Updated propeller designation (field A.III (7.2 and 7.3). Added note 6	
Issue 09	07 Aug 2020	Amended to remove typo and include change MOD2010/194 (EASA approval 10073987)	
Issue 10	08 Oct 2020	Amended to included P2010 TDI model (MOD2010/162 –EASA approval 10074522)	