Civil Aviation Authority United Kingdom



TYPE-CERTIFICATE DATA SHEET

UK.TC.A.00029

for P2012

Type Certificate Holder

Costruzioni Aeronautiche TECNAM S.P.A.

Via S. D'Acquisto, 62 80042, Boscotrecase (Naples) Italy

Model(s): P2012 Traveller

Issue:

Date of issue: 13 April 2022

TCDS No.: UK.TC.A.00029

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AW-DAW-TP-004 Version 1 dated 12 March 2021

TABLE OF CONTENTS

TABLE OF CONTENTS			
Section	n 1P2012	3	
I.	General	3	
II.	Certification Basis	3	
III.	Technical Characteristic and Operating Limitations	4	
IV.	Operating and Service Instructions	7	
V.	Operational Suitability Data (OSD)	8	
VI.	Notes	8	
Section	n 2 Administration	9	
l.	Acronyms and Abbreviations	9	
l.	Type Certificate Holder Record	10	
п	Amandment Record	10	

Section 1 P2012

I. General

1. Type / Model / Variant

1.1 Type

P2012

1.2 Model

P2012 Traveller

1.3 Variant

_

2. Airworthiness Category

CS-23 Normal Category

3. Type Certificate Holder

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

4. Manufacturer

Costruzioni Aeronautiche Tecnam S.p.A.

Via Salvo D'acquisto 62

80042, Boscotrecase (Naples)

Italy

5. State of Design Authority

European Union Aviation Safety Agency (EASA)

6. State of Design Authority Type Certificate Date

19 December 2018

7. State of Design Authority Type Certificate Number

EASA.A.637

II. Certification Basis

1. Reference date for determining the applicable requirements

19 December 2015

2. Airworthiness Requirements

- EASA CS-23 amdt.4 dated 15 July 2015
- EASA CS-ACNS initial issue dated 17 December 2013

3. Special Conditions

- EASA CRI B-52 SC-B23.div-01 Human Factors Integrated Avionic System
- EASA CRI F-58 SC-F23.1353-02 Lithium Battery Installations
- EASA CRI E-060 SC-CS-23.1305 Fuel low level annunciation mean
- EASA CRI D-103 SC-CS-23.803 Emergency evacuation for Air Medical service (see Section 1.VI Note 7)
- EASA CRI E-08 SC-O23.div-01 Usage of aeroplanes for parachuting activities (see Section 1.VI Note 10)

TCDS No.: UK.TC.A.00029

Date: 13 April 2022

Issue: 1 Page 3 of 10

AW-DAW-TP-004 Version 1 dated 12 March 2021

4. Exemptions

None.

5. Deviations

None.

6. Equivalent Safety Findings

None.

7. Requirements elected to comply

- EASA CS-23 Amdt.4 para. 23.783(d)(e)
- EASA CS-23 amdt.4 para. 23.803(a)
- EASA CS-23 amdt.4 para. 23.807(d)
- EASA CS-23 amdt.4 para. 23.811(b)
- EASA CS-23 amdt.4 para. 23.813(a)
- EASA CS-23 amdt.4 para. 23.853(d)
- FAA FAR Part 23 para. 23.856

8. Environmental Standards

8.1 Noise

See Type Certificate Data Sheet for Noise (TCDSN) UK.TC.A.00029.

9. Operational Suitability Data (OSD)

9.1 Master Minimum Equipment List (MMEL)

EASA CS-GEN-MMEL initial issue dated 31 January 2014.

III. Technical Characteristic and Operating Limitations

1. Type Design Definition (TDD)

C. A. Tecnam Aircraft P2012 report "Type design definition" 2012/003 1st ed. and later revision.

2. Description

Twin engine, 11 seats, high wing airplane, aluminium construction, fixed tricycle landing gear.

3. Equipment

Equipment list, Doc. 2012/100 AFM Section 6 latest issue.

4. Dimensions

Span 14.0 m (45.9 ft) Length 11.8 m (38.7 ft) 4.4 m (14.4 ft) Height Wing Area 25.4 m² (273 ft²)

5. Engine

5.1 Model

2 x Lycoming TEO-540-C1A

5.2 Type Certificate

CAA Type Certificate No. EASA.IM.E.119

TCDS No.: UK.TC.A.00029

Issue: 1 Date: 13 April 2022 Page 4 of 10

AW-DAW-TP-004 Version 1 dated 12 March 2021

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5.3 Limitations

Max continuous power 280 kW (375 hp) at 2575 rpm

Other engine's limitations are listed in doc. No. 2012/100 "AFM", Section 2

6. Load Factors

Flap UP Flap DOWN

Positive $+3.44 \, \text{g}$ +2.0 g

Negative -1.37 g 0.0 g

7. Propellers

7.1 Model

2 x MT Propeller MTV-14-B-C-F/CF195-30 () (see Section 1.VI Note 1)

7.1.1 Type Certificate

CAA Type Certificate No. EASA.P.017

7.1.2 Number of blades

4

7.1.3 Diameter

1.950 m

7.1.4 Sense of Rotation

Clockwise (pilot's view).

8. Fluids

8.1 Fuel

AVGAS 100LL (ASTM D910) (see Lycoming SI-1070)

8.2 Oil

Lubricant specifications and grade are detailed into the Lycoming SI-1014.

9. Fluid capacities

9.1 Fuel

Total: 750 litres (198.1 US gallons)
Usable: 728 litres (192.3 US gallons)

9.2 Oil

Maximum oil capacity: 11.3 litres (12.0 qts)
Minimum: 3.8 litres (4.0 qts)

10. Air Speeds

10.1 Basic

Never exceed speed V_{NE} 223 KIAS (219 KCAS) (up to 15,000 ft)

204 KIAS (202 KCAS) at 19,500 ft (see Section 1.VI Note 9)

Maximum Structural Cruising Speed V_{NO} 176 KIAS (175 KCAS) (up to 15,000 ft)

161 KIAS (161 KCAS) at 19,500 ft (see Section 1.VI Note 9)

Design Manoeuvring speed V_A 141 KIAS (142 KCAS) Maximum flaps extended speed V_{FE} 124 KIAS (125 KCAS) TO

TCDS No.: UK.TC.A.00029 Issue: 1
Date: 13 April 2022 Page 5 of 10

AW-DAW-TP-004 Version 1 dated 12 March 2021

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119 KIAS (119 KCAS) LND

Minimum Control Speed V_{MC} 70 KIAS (76 KCAS) TO

67 KIAS (73 KCAS) LND

10.2 Optional (see Section 1.VI Note 5)

Never exceed speed V_{NE} 226 KIAS (222 KCAS) (up to 15,000 ft)

205 KIAS (202 KCAS) at 19,500 ft (see Section 1.VI Note 9)

Maximum Structural Cruising Speed V_{NO} 178 KIAS (177 KCAS) (up to 15,000 ft)

161 KIAS (161 KCAS) at 19,500 ft (see Section 1.VI Note 9)

Design Manoeuvring speed V_A 143 KIAS (143 KCAS)

Maximum flaps extended speed V_{FE} 126 KCAS (127 KCAS) TO

120 KIAS (120 KCAS) LND

Minimum Control Speed V_{MC} 71 KIAS (77 KCAS) TO

68 KIAS (74 KCAS) LND

11. Maximum Operating Altitude

19,500 ft (see Section 1.VI Note 8)

12. Approved Operations Capability

Day/Night-VFR, IFR.

Flight into expected or actual icing conditions is allowed only if Ice Protection system (MOD2012/002) is installed.

Flight into expected or actual icing conditions is forbidden if stall warning device (MOD2012/022) is installed.

13. Maximum Masses

13.1 Basic

Max Take-Off Mass: 3600 kg (7936 lb)

Max Landing Mass: 3600 kg (7936 lb)

13.2 Optional (see Section 1.VI Note 5)

Max Take-Off Mass: 3680 kg (8113 lb)
Max Landing Mass: 3630 kg (8003 lb)

14. Centre of Gravity Range

Forward Limit: 0.367 m (18 % MAC) behind datum up to 3000 kg

0.441 m (22 % MAC) behind datum at MTOM equal to 3600 kg

0.450 m (22.5 % MAC) behind datum at MTOM equal to 3680 kg (see Section 1.VI Note 5)

Straight line variation between indicated points.

Aft Limit: 0.606 m (31.0 % MAC) behind datum. Mean Aerodynamic Chord (MAC) is 1.839 m (72.4 in)

15. Datum

Vertical plane tangent to wing leading edge.

16. Control surface deflections

Elevator: 23°± 2° to pitch up / 13°± 2° to pitch down

Elevator Trim Tab: -8 ± 2° upward / -21° ± 2° downward

Elevator Trim Tab: $-6 \pm 4^{\circ}$ upward / $-23^{\circ} \pm 4^{\circ}$ downward (see Section 1.VI Note 5)

TCDS No.: UK.TC.A.00029 Issue: 1
Date: 13 April 2022 Page 6 of 10

AW-DAW-TP-004 Version 1 dated 12 March 2021

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Aileron: 20°± 2° upward / 15°± 2° downward Aileron Trim Tab: 30°± 2° upward / 28°± 2° downward

Rudder: 22°± 2° left / 22°± 2° right Rudder Trim Tab: $6^{\circ}\pm 2^{\circ}$ left / $6^{\circ}\pm 2^{\circ}$ right

Flaps: 0° Fully Retracted / 15°± 2° TO / 30°± 2° Fully Extended

17. Levelling Means

Seat support tracks (see AFM, 2012/100, Sect.6 for the procedure).

18. Minimum Flight Crew

1 (Pilot)

19. Maximum Passenger Seating Capacity

9 (see Section 1.VI Note 6)

20. Baggage/Cargo Compartments

Max Allowable Loads:

Front: 103 kg (227 lb)

Location: 3.316 m (10.88 ft) forward of datum

Rear: 239 kg (527 lb)

3.518 m (11.54 ft) aft of datum Location:

21. Wheels and Tyres

Nose Wheel Tyre Size 6.00-6 Main Wheel Tyre Size 6.50-10

22. Serial Numbers Eligible

S/N 002 and subsequent.

IV. Operating and Service Instructions

1. Aircraft Flight Manual (AFM)

Doc. No 2012/100 "Aircraft Flight Manual" Issue. 1 or latest issue.

2. Aircraft Maintenance Manual (AMM)

Doc. No 2012/101 "Aircraft Maintenance Manual" Issue. 1 or latest issue.

3. Illustrated Parts Catalogue

Doc. No 2012/103 "Aircraft Illustrated Parts Catalogue" Issue. 1 or latest issue.

4. Instruments and appliances

Doc. No 2012/101 "Aircraft Maintenance Manual" Issue. 1 or latest issue.

TCDS No.: UK.TC.A.00029

Date: 13 April 2022

AW-DAW-TP-004 Version 1 dated 12 March 2021

Copies of this document are not controlled and printed copies only valid on date of print.

Issue: 1 Page 7 of 10

V. Operational Suitability Data (OSD)

The OSD elements listed below were approved by the European Union Aviation Safety Agency (EASA) as per Commission Regulation (EU) 748/2012, as amended by Commission Regulation (EU) No 69/2014.

Future revisions will be approved by the UK CAA in accordance with Regulation (EU) No. 748/2012 as retained (and amended in UK domestic law) under the European Union (Withdrawal) Act 2018 and amended by the Aviation Safety (Amendment etc.) (EU Exit) Regulations 2019.

1. Master Minimum Equipment List (MMEL)

The MMEL is defined in the P2012 GEN.MMEL, Report n°2012/275, Edition 1 Revision 2 or later approved revisions.

VI. Notes

- As per Manufacturer TCDS, propellers with designation having a "small" letter in the place of the brackets 1. (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
- 2. Fuel Combustion Heater change (MOD2012/008) is approved as per EASA approval No. 10069738.
- 3. Until the completion of the Fatique Test, the A/C is life limited as listed in Section 04 of the AMM.
- The following P2012 Optional Equipment are approved within the Type Investigation P2012 process. 4.
 - MOD2012/001 Autopilot System
 - MOD2012/002 TKS FIKI system Ice protection system
 - MOD2012/003 Flight Management System keyboard
 - MOD2012/004 Weather radar
 - MOD2012/005 TAS unit
 - MOD2012/006 Satellite data-link
 - MOD2012/007 Iridium data-link
 - MOD2012/009 Air Conditioning
- When MOD 2012/017 "MTOW increment up to 3680 kg" (EASA approval 10073218) is installed. 5.
- The maximum passenger seating capacity is limited when MOD2012/098 "SMP configuration" (EASA approval 10074612) is installed, refer to details reported in No.2012/100 "AFM Supplement S-15, Section 2".
- When MOD 2012/027 "P2012 MedEvac configuration" (EASA approval 10075149) is installed. 7.
- For Flight operation above 13,000 ft the maximum seating capacity is reduced to 4 occupants and oxygen operational requirements must be met by operators, refer to details reported in No.2012/100 "AFM Supplement S-20, approved as per MOD2012/020 "Max operating altitude at 19,500 ft" (EASA approval 10076658).
- Airspeed value linearly reducing from 15,000 ft to 19,500 ft.
- 10. When MOD2012/153 "P2012 configuration for parachuting operations" (EASA approval 10077584) is installed. Maximum allowed parachutists and additional operative limitations are detailed in report No.2012/100 "AFM Supplement S-19".

TCDS No.: UK.TC.A.00029

Section 2 Administration

Acronyms and Abbreviations I.

Acronym / Abbreviation	Definition
a/c	Aircraft
AFM	Aircraft Flight Manual
AMM	Aircraft Maintenance Manual
ASTM	American Society for Testing and Materials
CAA	Civil Aviation Authority
CRI	Certification Review Item
CS	Certification Specification
EASA	European Union Aviation Safety Agency
ft	Feet
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
IPC	Illustrated Part Catalogue
KCAS	Knots Calibrated Air Speed
kg	Kilogram(s)
KOEL	Kind of Operations Equipment List
lb	Pound(s)
LND	Landing
m	Metre(s)
MAC	Mean Aerodynamic Chord
MTOM	Maximum Take-Off Mass
S/N	Serial Number
TC	Type Certificate
TCDS	Type Certificate Data Sheet
TCDSN	Type Certificate Data Sheet for Noise
TCH	Type Certificate Holder
TO	Take-Off
UK	United Kingdom
VFR	Visual Flight Rules

TCDS No.: UK.TC.A.00029

Date: 13 April 2022

AW-DAW-TP-004 Version 1 dated 12 March 2021

Page 9 of 10

Issue: 1

I. Type Certificate Holder Record

TCH Record	Period
Costruzioni Aeronautiche TECNAM S.p.A.	Present. No changes.
Via Salvo D'Acquisto, 62	
80042, Boscotrecase (Naples)	
Italy	

II. Amendment Record

TCDS Issue No.	TCDS Issue Date	Changes	TC Issue and Date
1	13 Apr 2022	The content of the initial issue of UK CAA TCDS was taken from EASA TCDS No. EASA.A.637 Issue 07 dated 14 December 2020 which was the current EASA version at 31 December 2020 and therefore the version of the TCDS for the P2012 accepted by the UK under Article 15 of Annex 30 of the UK-EU Trade and Cooperation Agreement. The following changes have been made: Section 1.II.2: added reference to CS-ACNS. Section 1.II.3 added reference to EASA CRI E-08 Section 1.II.8.1: added reference to UK TCDSN. Section 1.III.9.1: added reference to CS-GEN-MMEL. Section 1.III.10.1 and 10.2: revised airspeed limitations. Section 1.V: added OSD and MMEL sections. Section 1.VI: added notes 8, 9 and 10.	Issue 1 13 Apr 2022