
Type Acceptance Report

TAR 5/21B/4 – Revision 1

Tecnam P2002/P-Mentor Series

TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1. INTRODUCTION	1
2. AIRCRAFT CERTIFICATION DETAILS	2
3. APPLICATION DETAILS AND BACKGROUND INFORMATION	4
4. NZCAR §21.43 DATA REQUIREMENTS	5
5. NEW ZEALAND OPERATIONAL RULE COMPLIANCE	7
ATTACHMENTS	8
APPENDIX 1 – NZ TYPE ACCEPTANCE HISTORY	8
APPENDIX 2 – THREE-VIEW DRAWING	9

Executive Summary

New Zealand Type Acceptance has been granted to the Tecnam P2002/P-Mentor Series based on validation of EASA Type Certificate number A.006. There are no special requirements for import.

Applicability is currently limited to the models and/or serial numbers detailed in Section 2, which are now eligible for the issue of an Airworthiness Certificate in the Standard Category in accordance with NZCAR §21.191, subject to any outstanding New Zealand operational requirements being met. (See Section 5 of this report for a review of compliance of the basic type design with the operating Rules.) 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).

NOTE: The information in this report was correct as at the date of issue. The report is generally only updated when an application is received to revise the Type Acceptance Certificate. For details on the current type certificate holder and any specific technical data, refer to the latest revision of the State-of-Design Type Certificate Data Sheet referenced herein.

1. Introduction

This report details the basis on which Type Acceptance Certificate No. 5/21B/4 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 model(s) in New Zealand; and
- (b) Identify any special conditions for import applicable to any model(s) covered by the Type Acceptance Certificate; and
- (c) Identify any additional requirements which must be complied with prior to the issue of a NZ Airworthiness Certificate or for any subsequent operations.

The report notes the status of all models included under the State-of-Design type certificate which have been granted type acceptance in New Zealand, which are listed in Section 2. The history of the Tecnam P2002/P-Mentor Series type acceptance in New Zealand under type certificate EASA.A.006 is listed in Appendix 1.

2. Aircraft Certification Details

(a) State-of-Design Type and Production Certificates:

Manufacturer: Costruzioni Aeronautiche TECNAM S.p.A.
Costruzioni Aeronautiche TECNAM S.r.l. (until Nov 12, 2019)

Type Certificate: A.006
Issued by: European Union Aviation Safety Agency

Production Approval: IT.21G.0032

(b) Models Covered by the Part 21B Type Acceptance Certificate:

(i) **Model:** P2002-JF

MCTOW: 580 kg (1278 lb.)
600 kg (1320 lb.) – with MOD 2002/29 or SB010-CS
620 kg (1364 lb.) – with MOD 2002/87 or SB0105-CS

Max. No. of Seats: 2

Noise Standard: JAR 36/ICAO Annex 16

Engine: Rotax 912 S2
Rotax 912 S3 – with MOD 2002/127
Type Certificate: EASA.E.121

Propeller: Hoffmann HO17GHM-A-174 177C
Type Certificate: Luftfahrt-Bundesamt 32.110/1

Hoffmann HOV352F1/C170FQ+8 – with MOD 2002/127
Type Certificate: Luftfahrt-Bundesamt 32.130/88

(ii) **Model:** P2002-JR

MCTOW: 600 kg (1320 lb.)

Max. No. of Seats: 2

Noise Standard: JAR 36/ICAO Annex 16

Engine: Rotax 912 S3
Type Certificate: EASA.E.121

Propeller: Hoffmann HOV352F1/C170FQ+8
Type Certificate: Luftfahrt-Bundesamt 32.130/88

(iii) Model:	P-Mentor
MCTOW:	720 kg (1587 lb)
Max. No. of Seats:	2
Noise Standard:	CS-36 Amendment 5/ICAO Annex 16
Engine:	Rotax 912 iSc3 Sport Type Certificate: EASA.E.121
Propeller:	MTV-21-A/180-51 Type Certificate: EASA.P.101

3. Application Details and Background Information

The application for New Zealand type acceptance of the P2002-JF was from the New Zealand agent, Mr Giovanni Nustrini, dated 31 July 2004. The first-of-type example was serial number 009 registered ZK-TVB. The P2002 Series is a two-seat low-wing all-metal single-engined light training aircraft with fixed undercarriage.

Type Acceptance Certificate Number 5/21B/4 was granted on 29 December 2004 to the Tecnam P2002-JF based on validation of EASA Type Certificate A.006. Specific applicability is limited to the coverage provided by the operating documentation supplied. There are no special requirements for import into New Zealand.

This report was raised to Issue 2 to add the P-Mentor version and include the other P2002-JR model on the type certificate. The application was from the manufacturer dated 11 October 2022. Type acceptance was granted on 12 December 2022.

Type and Model History:

The P2002-JF is a new low-wing design by Tecnam to replace the earlier P96 Golf. It is of conventional all-metal design and construction. (Tecnam model designations indicate the year they were introduced.) The P2002-JR is the second variant which is fitted with a retractable undercarriage and a different engine/propeller combination with increased MAUW. The powerplant and increased weight modifications were subsequently incorporated as optional changes on the fixed-gear P2002-JF.

The P-Mentor is the latest development of the P2002 Series, defined by Modification 2002/217 to the P2002-JF. The wing is modified with a longer wingtip, extended span flap and the fuel tank has been relocated. The fuselage skin is now fibreglass and the fuselage and canopy shape have been changed. The aircraft has a fuel-injected Rotax engine and MTV constant speed propeller. Other changes include the use of the G3x Touch avionics suite, and a parachute recovery system is now fitted as standard. The P-Mentor has been type certificated under CS23, with VFR/Night and IFR approvals.

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) State-of-Design Type certificate:

Type Certificate EASA.A.006 Tecnam P2002-JF issued 27 May 2004

EASA Type Certificate Data Sheet A.006 at Issue 13 dated 24 November 2022

– Model P2002-JF approved 27 May 2004

– Model P2002-JR approved 2 February 2007

– Model P-Mentor approved 06 April 2022

Annex to TCDS – Explanatory Note No. EASA.A.006

EASA Major Change Approval 10078966 – MOD 2002/217 P-Mentor

(2) Airworthiness design requirements:

(i) *Airworthiness Design Standards:*

The certification basis of the P2002-JF and P2002-JR is EASA CS-VLA dated 14/11/2003. (Equivalent to JAR-VLA ed. 26/04/1990 including amendments VLA/91/1 dated October 22nd, 1991, and VLA/92/1 dated January 1, 1992.)

The certification basis of the P-Mentor was upgraded to CS-23 Amendment 5, dated 29 March 2017 with EASA CS-ACNS issue 2, dated 26 April 2019.

This is an acceptable certification basis in accordance with NZCAR Part 21B Para §21.41, as JAR-VLA is equivalent to FAR 23 for this class of aircraft when limited to Day-VFR operations, or night operations when Special Conditions have been complied with. CS23 is also equivalent to FAR 23, which is the basic design standard for Normal Category Airplanes called up under Part 21 Appendix C. There are no non-compliances and no special conditions have been prescribed by the Director under §21.23.

(ii) *Special Conditions:*

CRI A-03 (SC VLAVFR Night) – To allow Night VFR approval under VLA rules this Special Condition introduces a range of additional provisions related to stability; type certification of the engine and propeller; air filter functionality; powerplant controls security; visibility of instruments and controls, glare and lighting; and other requirements for systems integrity.

(iii) *Equivalent Level of Safety Findings:*

Nil

(iv) *Airworthiness Limitations:*

See applicable AMM Chapter 4.

(3) Aircraft Noise and Engine Emission Standards:

(i) *Environmental Standard:*

The P2002 has been certificated for noise under JAR-36, 1st edition dated 23rd May 1996 Subpart C, with reference to ICAO Annex 16, 3rd Edition 1993, Vol 1, Chapter 10. For the P-Mentor this was updated to CS-36 Amendment 5.

- (ii) *Compliance Listing:*
TCDS for Noise EASA.A.006 at Issue 9 dated 04 May 2022
- (4) Certification Compliance Listing:
 - Report no. 2002/40 CS VLA Compliance Check List – 1st Edition
 - Report no. 2002/1001 P-Mentor Certification Programme – Edition 6
 - Report no. 2002/1002 P-Mentor Compliance Checklist – Edition 5
- (5) Flight Manual: EASA-Approved Airplane Flight Manual P2002-JF
Document no. 2002/28 – CAA Accepted as AIR 2871

EASA-Approved Airplane Flight Manual P2002-JR
Document no. 2002/91 – CAA Accepted as AIR 3503

EASA-Approved Aircraft Flight Manual Tecnam P-Mentor
Document no. 2002/1032 – CAA Accepted as AIR 3504
- (6) Operating Data for Aircraft:
 - (i) *Maintenance Manual:*
Maintenance Manual P2002-JF – Document no. 2002/30

Maintenance Manual P2002-JR – Document no. 2002/93

P-Mentor Aircraft Maintenance Manual – Document no. 2002/1033
 - (ii) *Current service Information:*
Service Bulletins and Service Information Letters
 - (iii) *Illustrated Parts Catalogue:*
IPC P2002-JF/Sierra – Document no. 2002/31

IPC P-Mentor – Document no. 2002/1234
- (7) Agreement from manufacturer to supply updates of data in (5), and (6):
CAA 2171 Form signed by Tecnam Technical Manager dated 23 July 2004

Technical Publications are now available on the Customer Portal
<https://www.tecnam.com/my-tecnam/>
- (8) Other information:
Report no. 2002/1011 P-Mentor Electric Load Analysis for MOD2002/217

5. New Zealand Operational Rule Compliance

Compliance with the retrospective airworthiness requirements of NZCAR Part 26 is a prerequisite for the grant of a type acceptance certificate.

CAR Part 26 – Subpart B – Additional Airworthiness Requirements

Appendix B – All Aircraft

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
B.1	Marking of Doors and Emergency Exits	<i>To be determined on an individual aircraft basis</i>
B.2	Crew Protection Requirements - CAM 8 Appdx. B # .35	Not Applicable – Agricultural aircraft only

Compliance with the following additional NZ operating requirements has been reviewed for the P2002-JF/JR and were found to be covered by either the original certification requirements or the basic build standard of the aircraft, except as noted:

CAR Part 91 – Subpart F – Instrument and Equipment Requirements

PARA:	REQUIREMENT:	MEANS OF COMPLIANCE:
91.505	Shoulder Harness if Aerobatic; >10 pax; Flight Training	JAR-VLA §785 and §1309 – “Aircraft features four-point fitting safety belts” – See Flight Manual Section 7 : Systems
91.507	Pax Information Signs - Smoking, safety belts fastened	Not Applicable – Less than 10 passenger seats
91.509	Minimum Instruments and Equipment	
	(1) ASI *	JAR-VLA §1303(a)
	(2) Machmeter	N/A – No Mach no. limitations
	(3) Altimeter *	JAR-VLA §1303(b)
	(4) Magnetic Compass *	JAR-VLA §1303(c)
	(5) Fuel Contents *	JAR-VLA §1305(a)
	(6) Engine RPM *	JAR-VLA §1305(d)
	(7) Oil Pressure *	JAR-VLA §1305(b)
		(8) Coolant Temp *
		(9) Oil Temperature *
		(10) Manifold Pressure
		(11) Cylinder Head Temp
		(12) Flap Position
		(13) U/c Position
		(14) Ammeter/Voltmeter
		JAR-VLA §1305(j)
		JAR-VLA §1305(b)
		N/A – Fixed pitch propeller
		N/A – Less than 250 hp
		Fitted as std – See FM Fig. 7-2
		N/A – Fixed undercarriage
		JAR-VLA §1351(d) – See FM 7.2
		* Required minimum equipment – See Flight Manual Section 2 Limitations : Kinds of Operation
91.511	Night VFR Instruments and Equipment	P2002-JF and P2002-JR are approved for Night VFR operations when fitted with Design Changes MOD 2002/050 “VFR Night” and MOD 2002/041 “Garmin G500 Avionics Display System”, or MOD 2002/084 “VFR Night for Analogical version”.
91.513	VFR Communication Equipment	See Flight Manual Equipment List for Avionics options
91.517	IFR Instruments and Equipment	Not Applicable – P2002-JF/JR Approved for VFR only
91.519	IFR Communication and Navigation Equipment	Not Applicable – P2002-JF/JR Approved for VFR only
91.523	(a) More Than 10 pax – First Aid Kits per Table 7	First Aid Kit standard fit per AFM Equipment List
Emrgcy	– Fire Extinguishers per Table 8 *	Fire Extinguisher standard fit per AFM Equipment List
Eqpmt.	(b) More than 20 pax – Axe readily acceptable to crew *	Emergency Hammer standard fit per AFM Equipment List
	(c) More than 61 pax – Portable Megaphones per Table 9	Not Applicable – Less than 61 passenger seats
91.529	ELT - TSO C126 406 MHz after 22/11/2007	Operating Requirement – Compliance as applicable
91.531	Oxygen Indicators - Volume/Pressure/Delivery	Not fitted as standard
91.533	Oxygen for Non-pressurised Aircraft	Operating Requirement – Compliance as applicable
91.541	SSR Transponder and Altitude Reporting Equipment	See Flight Manual Equipment List for Avionics options
91.543	Altitude Alerting Device - Turbojet or Turbofan	Not Applicable – Piston-engine powerplant
91.545	Assigned Altitude Indicator	Not Applicable – P2002-JF/JR Approved for VFR only
A.15	ELT Installation Requirements	<i>To be determined on an individual aircraft basis</i>

NOTES: 1. Flight Manual Section 6 – Weight & Balance contains a comprehensive Equipment List.

2. A Design Rule reference in the Means of Compliance column indicates the Design Rule was directly equivalent to the CAR requirement, and compliance is achieved for the basic aircraft type design by certification against the original Design Rule.

3. The CAR Compliance Tables above were correct at the time of issue of the Type Acceptance Report. The Rules may have changed since that date and should be checked individually.

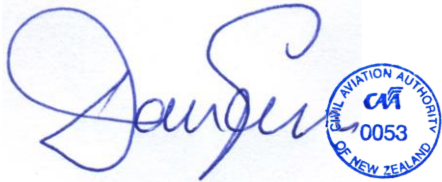
4. The P-Mentor model fitted as standard with the Garmin G3x and GI-275 meets the IFR requirements of CAR §91.517/519/541/543.

Attachments

The following documents form attachments to this report:

Copy of EASA Type-Certificate Data Sheet A.006

Sign off

A blue ink signature of David Gill is written over a circular blue seal of the Civil Aviation Authority of New Zealand. The seal contains the text 'CIVIL AVIATION AUTHORITY OF NEW ZEALAND' and the number '0053'.

.....
David Gill
Team Leader Aircraft Inspection

A blue ink signature of Owen Olls is written over a circular blue seal of the Civil Aviation Authority of New Zealand. The seal contains the text 'CIVIL AVIATION AUTHORITY OF NEW ZEALAND' and the number '0053'.

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Checked – Owen Olls
Airworthiness Inspector

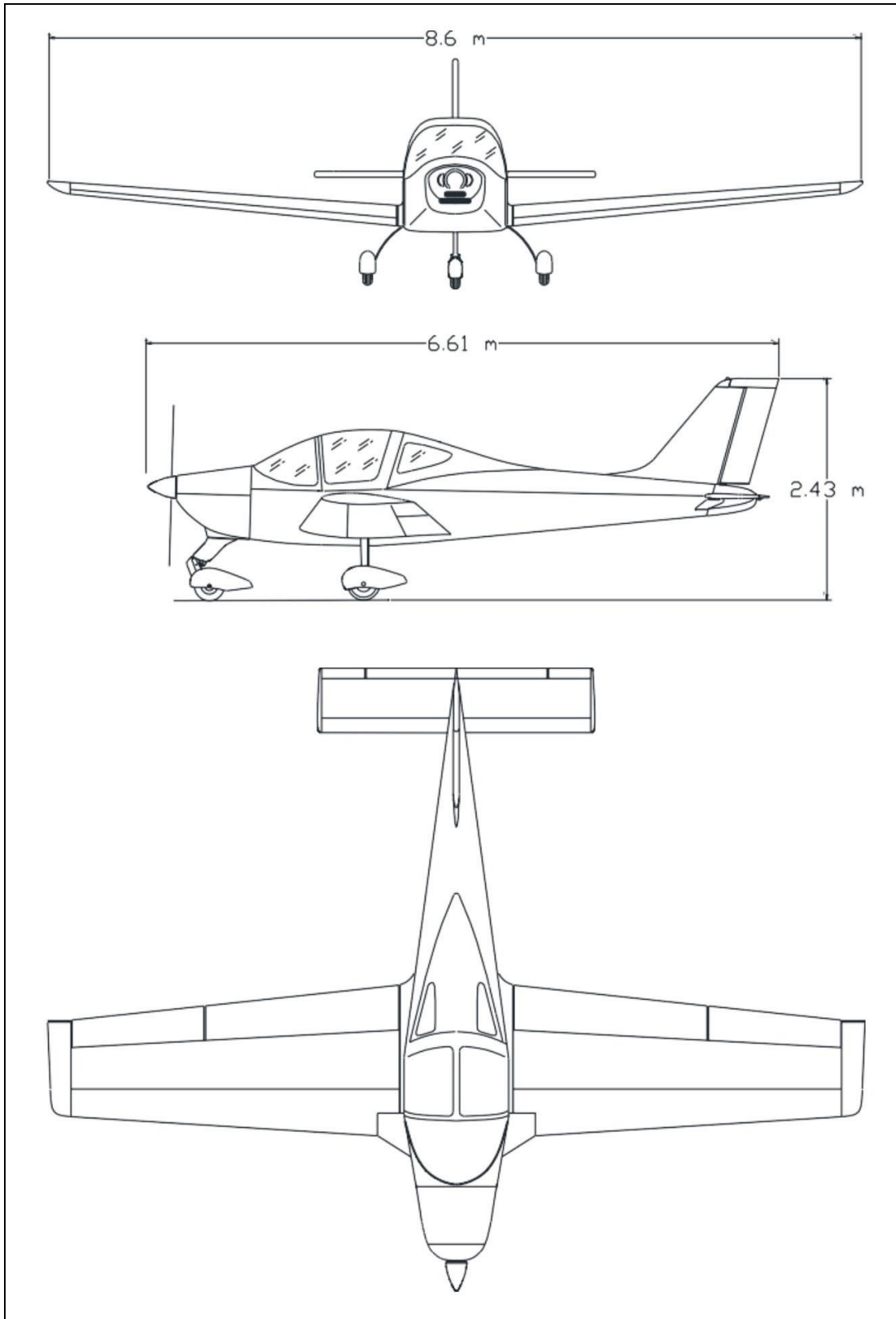
Appendix 1

List of Type Accepted Variants:

<i>Model:</i>	<i>Applicant:</i>	<i>CAA Work Request:</i>	<i>Date Granted:</i>
P2002-JF	G Nustrini	5/21B/4	29 December 2004
P2002-JR	Costruzioni Aeronautiche Tecnam S.p.A.	23/21B/5	12 December 2022
P-Mentor	Costruzioni Aeronautiche Tecnam S.p.A.	23/21B/5	12 December 2022

Appendix 2

Three-view drawing Tecnam P2002-JF



Three-view drawing Tecnam P-Mentor

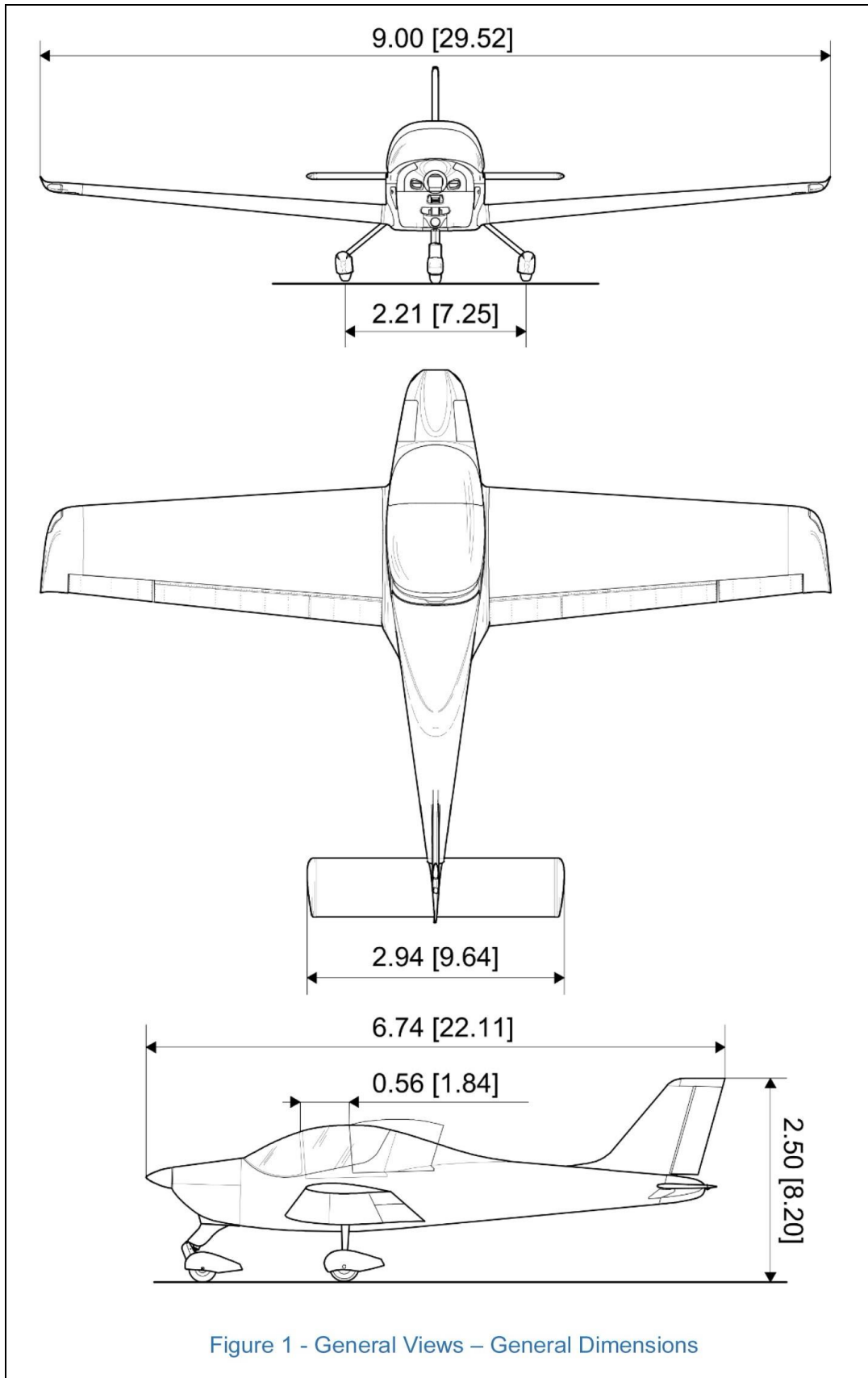


Figure 1 - General Views – General Dimensions