TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.594

for
PC-24

Type Certificate Holder
PILATUS Aircraft Ltd.

Pilatusstrasse 1
6371 Stans
Switzerland

For models: PC-24

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CONTENTS

SECTION A: PC-24

A.I General

1.	Type: Variant:	PC-24
2.	Airworthiness Category:	CS-23, Commuter category
3.	Type Certificate Holder:	PILATUS Aircraft Ltd. Pilatusstrasse 1, 6371 Stans Switzerland
4.	Manufacturer:	PILATUS Aircraft Ltd. Pilatusstrasse 1, 6371 Stans Switzerland
5.	Certification Application Date:	9 July 2012
6.	EASA Certification Date:	7 December 2017

A.II Certification Basis

1.	Reference Date for determining the applicable requirements:	7 December, 2012
2.	(reserved)	
3.	(reserved)	
4.	Certification Basis:	EASA CRI A-01 (Refer further to Note 5)
5.	Airworthiness Requirements:	EASA CS-23, Certification Specifications for Normal, Utility, Aerobatic and Commuter Category Aeroplanes, Amendment 3, Effective 20th July 2012.
6.	Requirements elected to comply:	Airborne Communications, Navigation and Surveillance (ACNS). (Refer further to Note 5)

7. Special Conditions:

CRI B-01	Handling and Performance
CRI B-02	High Speed Characteristics
CRI B-03	Stall Speed Determination
CRI B-04	Contaminated Runways
CRI B-05	Stick Pusher
CRI B-152	Human Factors
CRI C-01	Sonic Fatigue
CRI C-02	Pressurisation into Non-Pressurized Areas
CRI C-05	Dynamic Response
CRI C-06	Out of Trim Conditions (Structures)
CRI C-07	Round-the-clock Gust
CRI D-01	Take-Off Warning System
CRI D-02	Extension and Retraction Systems

CRI D-03	Wheels
CRI D-04	Brakes and Braking Systems
CRI D-05	Doors
CRI D-06	Bird Strike
CRI D-09	Operation above 41.000 ft (see note 4)
CRI E-01	Fuel Tank Crashworthiness
CRI E-04	Lines, Fittings and Components
CRI E-06	Powerplant Fire Extinguishing Systems
CRI E-10	Fuel Tank Ignition Prevention
CRI E-11	Induction System Ice Protection - Cold Soaked Fuel
CRI E-59	Engine Installation (Rain Conditions)
CRI E-102	Single Point Defueling
CRI F-01	Battery Endurance Requirement
CRI F-03	Interaction of Systems and Structures
CRI F-07	Data Link Services Recording
CRI F-15	Airworthiness Information Security
CRI F-52	Protection from effect of HIRF
CRI F-54	Protection from the effects to lightning strike, indirect effects
CRI F-58	Lithium Battery Installations
CRI F-62	Flight Instrument External Probes – Qualification in extended Icing conditions
CRI F-110	Auto-throttle
CRI G-02	Approval process of digital AFM
CRI O-01	Steep Approach
CRI O-04	Towbarless towing loads
CRI AWO-101	CAT II requirements for CS 23 aeroplane

8. Exemptions: None.

9. Equivalent Safety Findings:

CRI E-56	Powerplant System Indications
CRI F-05	IMA Individual Circuit Protection
CRI F-90	ASI Flaps Markings on PFD
CRI F-108	ESIS 3rd ATT Indicator (ESIS) Compliance to CS 23.1303
CRI F-111	Mechanical Magnetic Compass - Flight Deck without Whisky Compass
CRI F-112	Pressurization and Pneumatic systems – bleed air level compliance

10. Environmental Standards:

Noise: Chapter 1 of ICAO Annex 16, Volume I, amendment 9, Part II to the Chicago Convention and as implemented in Decision No. 2003/4/RM amended by Decision 2009/012/R of The Executive Director of the Agency, on certification specifications providing for acceptable means of compliance for aircraft noise (CS-36, Amendment 2).

CRI N-01 Noise Standards.

CRI N-02 Reference T/O-speed for Part 23 Jet Noise Certification.

CRI N-03 Use of NTO vs. MTO

Emissions: Chapter 2 of ICAO Annex 16 Volume II, amendment 6, Part II to the Chicago Convention for the prevention of intentional fuel venting and as implemented in Decision No. 2003/3/RM of The Executive Director of the Agency dated 17 October 2003, on certification specifications providing for acceptable means of compliance for aircraft engine emissions and fuel venting (CS-34).

11. Operational Suitability Certification Basis:

MMEL:	CS-MMEL, Initial Issue.
Flight Crew Data:	CS-FCD, Initial Issue.
Simulator Validation Data:	CS-SIMD, Initial Issue.

12. Eligible MSN: MSN P03, 101 and up.

A.III Technical Characteristics and Operational Limitations

1. Type Design Definition: 500.00.24.001

2. Description: The PC-24 is a low-wing Business aircraft, powered by two rear-mounted Williams FJ44-4A-QPM twin spool turbofan engines of 3,420 lbs take-off thrust rating, with a T-tail configuration and a retractable undercarriage.

   The PC-24 is pressurised with an 8'000 ft cabin altitude at its maximum operating altitude of 45'000ft.

   It has a maximum seating capacity of up to 10 passengers in the cabin and 1 or 2 pilots. Standard seating configuration is a 6-seat executive arrangement with forward lavatory and aft galley. The aircraft may be flown with one or two pilots.

   A unique feature of the PC-24 shall be the capability of transporting a mixture of passengers and cargo, using the two doors. The PC-24 has a passenger door on the left hand side behind the cockpit, a large cargo door at the back of the cabin on the left hand side behind the wing and two over wing emergency exits, one on each side of the cabin.

   The PC-24 aircraft is designed to be able to take-off and land in short airfields (<2'650ft)

3. Dimensions:

Main Wing Span:	17'000 mm	(55 ft 9 in)
Length:	16'800 mm	(55 ft 1 in)
Height:	5'400 mm	(17 ft 4 in)
Total Wing Area:	30.91 m2	(332.7 ft2)

4. Engines:

Model:	2 Williams International FJ44-4A-QPM Turbofan engines of 3,420 lbf normal take-off thrust each, situated in nacelles on each side of the rear fuselage.
Type Certificate:	The FJ44-4-QPM is certified by EASA under Type Data Sheet number TCDS IM.E.016 issue 10 dated 4 August 2017.

5. Engine Limits:

Refer to latest revision TCDS No. IM.E.016 Williams International Engine FJ44-4A-QPM.

Oil Temperature:
Refer to latest revision TCDS No. IM.E.016 Williams International Engine FJ44-4A-QPM.

6. Fluids:

6.1. Fuel:	• Refer to the latest revision Williams International Engine Installation and Operating Instructions 110675-201 FJ-44-4A-QPM (73200-201) (including JET A, JET A-1, JP-8, TS-1). • Fuel Anti-Ice Additives are not required.
6.2. Oil:	• Refer to the latest revision Williams International Engine Installation and Operating Instructions 110675-201 FJ-44-4A-QPM (73200-201) (including Mobil Jet II, Mobil 254)

7. Fuel capacities

7.1. Fuel:

Total:	3,389 lt	(894 US Gal)	2,721 kg	(6,000 lb)
Usable:	3,369 lt	(890 US Gal)	2,705 kg	(5,964 lb)
Unusable:	20 lt	(5.3 US Gal)	16 kg	(35 lb)

7.2. Oil:

Total:	5.5 lt	(5.85 qts)
Usable quantity:	4.3 lt	(4.63 qts)

8. Air Speeds:			
VMO	(maximum operating speed)		290 KEAS
MMO	(maximum operating Mach number)		0.74
VD	(maximum diving speed)		360 KEAS
MD	(maximum diving Mach number)		0.81
VA	(manoeuvring speed) at MTOW		
	- *For aircraft with Design Weight Increase MSN 501 and up*		187 KEAS
	- *For aircraft MSN P03, MSN 101 through 130 - Post SB 42-002, and MSN 131 through 500*		185 KEAS
VC	(design cruising speed)		290 KEAS
VFE	(max. flap extended speed)	8° (Take-Off) Flap	200 KEAS
		15° (Approach) Flap	200 KEAS
		33° (Landing) Flap	175 KEAS
VLO	(maximum landing gear operating speed)	Extension	250 KEAS
		Retraction	200 KEAS
VLE	(maximum landing gear extended speed)		250 KEAS
VSO	(stall speed, ISA, sea level, max landing weight, landing configuration)		
	- *For aircraft with Design Weight Increase MSN 501 and up*		83 KCAS
	- *For aircraft MSN P03, MSN 101 through - 130 Post SB 42-002, and MSN 131 through 500*		82 KCAS

9. Maximum Operating Altitude: 13’716 m / 45’000 ft (see note 4)

10. Operational Capabilities: IFR Day/Night; VFR Day/Night, FIKI (Note 6)

11. Maximum Weight:

For aircraft with Design Weight Increase MSN 501 and up

Taxi and ramp	8’545 kg	(18'840 lbs)
Take-off	8’500 kg	(18’740 lbs)
Landing	7’865 kg	(17’340 lbs)
Zero fuel	6’650 kg	(14’660 lbs)

For aircraft MSN P03, MSN 101 through 130 - Post SB 42-002, and MSN 131 through 500

Taxi and ramp	8’345 kg	(18'400 lbs)
Take-off	8’300 kg	(18’300 lbs)
Landing	7’665 kg	(16’900 lbs)
Zero fuel	6’450 kg	(14’220 lbs)

For aircraft MSN 101 through 130 - Pre SB 42-002 (see Note 13)

Taxi and ramp	8’050 kg	(17'750 lbs)
Take-off	8’005 kg	(17’650 lbs)
Landing	7’370 kg	(16’250 lbs)
Zero fuel	6’100 kg	(13’450 lbs)

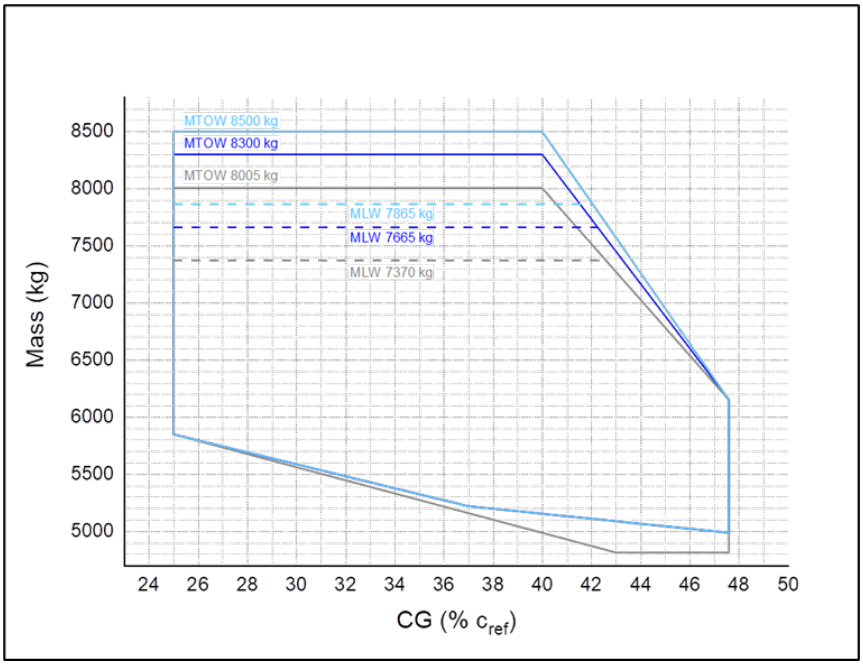
12. Centre of Gravity Range:

Figure shows the PC-24 Centre of Gravity (CG) limits, which accommodate all of the foreseen passenger and cargo loadings.

In Cyan: Aircraft MSN 501 and up
(MTOW of 8500 kg, MLW 7865 kg)

In Blue: Aircraft MSN P03, 101 through 130 - Post SB 42-002, and 131 through 500 (MTOW 8300 kg, MLW 7665 kg)

In Gray: Aircraft MSN 101 through 130 Pre SB 42-002 (see Note 13)
(MTOW 8005 kg, MLW 7370 kg)



13. Mean Aerodynamic Chord (MAC): 1.997 m (6ft 6”)

14. Levelling Means: Refer to the PC-24 Airplane Flight Manual, Section 6

15. Minimum Flight Crew: 1 Pilot
(see Note 8)

16. Maximum Passenger Seating Capacity: Executive Interiors Configuration: 8 PAX excluding pilot seats (see Note 9, 10 and 11). An optional fit allows two additional infants to be carried at the first seating row on the left and right sides.

	Commuter Interior Configuration: 10 PAX excluding pilot seats. (see Note 9, 10 and 11). Refer to the PC-24 Airplane Flight Manual, Section 6, for passengers and flight crew loading instructions and approved configurations.
17. Exit: Nb. and Type:	3 exits (fwd cabin LH passenger door and two over wing emergency exits, one on each side of the cabin) and 1 cargo door (LH rear cabin)
18. Baggage / Cargo Loading:	Refer to the PC-24 Airplane Flight Manual, Section 6
19. Wheels and Tyres:	
19.1. Wheels:	Nose Landing Gear: Parker 40-479 Main Landing Gear: Parker 40-478

19.2. Tyres:	Dimensions	Ply Rating	Speed Rating
Nose Landing Gear:	450x190-5	8 (PR)	190 (MPH)
Main Landing Gear:	24x7.7	10 (PR)	190 (MPH)

A.IV Operating and Service Instructions

1. Aircraft Flight Manual (AFM):
   Airplane operation must be in accordance with the EASA approved PC-24 Airplane Flight Manual and AFM supplements as define below:

   MSN P03, 101 and up — Pilatus Report No. 02371

2. Aircraft Maintenance Manual (AMM):
   Airplane maintenance must be in accordance with the document as defined below:

   MSN P03, 101 and up — Pilatus Report No. 02378

3. Structural Repair Manual (SRM):
   Airplane Repairs must be in accordance with the document as define below:

   MSN P03, 101 and up — Pilatus Report No. 02379

4. Flight Crew Operating Manual (FCOM)

   MSN P03, 101 and up — Pilatus Report PC-24 No. 02383

5. Service Bulletins (SBs):
   All Pilatus PC-24 Bulletin are listed in the following document:

   MSN P03, 101 and up — Pilatus Report No. 02430

6. All Pilatus PC-24 Service Letters are listed in the following document:

   MSN P03, 101 and up Pilatus Report No. 02431

7. RVSM capability for PC-24 MSN P03, 101 and up:
   All airplanes equipped with Honeywell APEX system are RVSM capable, provided the operator follows the AFM Issue 003 Revision 1 (or later revisions) and the AMM Issue 005 Revision 00, or later EASA approved revisions.

A.V Operational Suitability Data (OSD)

1. Master Minimum Equipment List (MMEL) — Pilatus Report PC-24 No 02384, latest approved revision

2. Flight Crew Data — Pilatus Report PC-24 No 02423, latest approved revision, as per the table below:

Manufacturer	Aircraft model/name	License endorsement	Variants	Complex	SP/ SP HPA / MP	OE GM / OEB / OSD FC available	Remarks
Pilatus Aircraft Ltd.	PC-24	PC-24	X	X	SP HPA	X	OSD FC PC-24
	PC-24 AYT						
	PC-24 TF						
	PC-24 AYT/TF						

3. Simulator Data — Validation Data Roadmap (VDR) report ER-24-001168, latest approved revision

A.VI Notes

1. Requirements for the issue of the C. of A.

   – The minimum required equipment as prescribed in the applicable airworthiness regulations must be installed on the individual aircraft for certification.

   – Current weight and balance data, a list of equipment included in the certification empty weight and loading information when necessary must be provided for each aircraft when the C. of A. will be issued.

   The certification empty weight and balance data shall include the unusable fuel and the total engine oil as specified:

   – Airplane Flight Manual is required.

2. Placards

   All required placards as listed in the Pilatus Aircraft Flight Manual, and subsequent approved revisions, must be installed in the appropriate locations.

3. Continued Airworthiness

   - Airworthiness Limitations are contained in Chapter 4 of the Pilatus AMM. These Limitations may not be changed without EASA approval.
   - Current weight and balance data together with a list of equipment included in the certificated empty weight, and loading instructions, when necessary, must be provided for each airplane at the time of original certification.
   - Only interior configurations described in the official Pilatus AFM are approved for installation in the PC-24 aircraft.

4. High altitude operations

   PC-24 airplanes have been approved for high altitude operations (altitudes above 41,000 feet), by Special Conditions. Any modifications to the pressure vessel must be approved in accordance with the requirements as shown in the certification basis. This includes modifications which could result in a pressure vessel opening, either through crack-growth or antenna loss, greater than 2.65 sq.in.

5. To support European operators and ensure that the PC-24 aircraft complies to the airspace rules, at initial TC, Pilatus elected to comply with Airborne Communications, Navigation and Surveillance (ACNS), reference CS ACNS initial issue dated 17 December 2013.

   For the Major Change project EASA n°60077318 introducing RNP AR, Pilatus elected to comply with the following sections of CS-ACNS issue 2 dated 26 April 2019, Subpart C — Navigation (NAV):

   - Subsection 6 — Supplementary specifications for RNP authorisation required (RNP AR)
   - Subsection 7 — Supplementary specifications for applications for advanced RNP (A-RNP)
   - Subsection 8 — Supplementary specifications supporting radius to fix (RF)
   - Subsection 10 — Supplementary specifications supporting parallel offset

   As CS-ACNS is continuously developed and updated, Pilatus may choose in the future to elect to comply with new sections or amendments.

For Thermal/acoustic insulation materials the standards of US 14 CFR Part 23 Amdt. 1 thru 62, §23.856 [23-62] are met.

For Ice protection beside the CS23.1419 and Special Condition F-62 requirements the standards of US 14 CFR Part 23 Amdt. 1 thru 62, §23.1419 [23-43] are met.

For Special Conditions (SC) and Equivalent Safety Findings (ESF), which are listed in the CRI A-01 and are part of the applicable certification basis refer further to the Annex to EASA.A.594

6. The PC-24 is approved for flight into known or forecasted icing. Compliance has been shown i.a.w. CS-23.1419 and SC F-62.

7. The PC-24 MSN P03, 101 and up equipped with Honeywell APEX system are RVSM capable. The commercial designation of the Honeywell APEX system as installed on the PC-24 is the PC-24 Advanced Cockpit Environment (ACE™).

8. Approval for operation with a minimum crew of one pilot is based upon the cockpit equipment installation and arrangement evaluated during certification testing. No significant changes may be made to the installed cockpit equipment or arrangement (EFIS, autopilot, avionics, etc.), except as permitted by the approved MMEL, without prior approval.

9. All replacement seats (crew and passenger), although they may comply with TSO C127, must also be demonstrated to comply with CS 23.321, 23.395, 23.561, 23.562, and 23.785.

10. The foam cushion build up of all seats (crew and passenger) may not be altered. Any deviations in the foam construction or stiffness must be demonstrated by test to comply with the listed CS 23 paragraphs

11. During single pilot operation, the pilot occupies the left hand cockpit seat and an additional passenger may occupy the right hand cockpit seat

12. Aircraft Classification

    In accordance with the EU Regulation (EC) 216/2008 definitions, the PC-24 is a “complex motor powered aircraft”.

    In accordance with the EU “Air Ops” Regulation (EC) 965/2012 definitions, the PC-24 is a “Performance Class A aeroplane”.

    In addition, the type certification basis of the baseline PC-24 product is CS-23 Amdt. 3 in the commuter category. However, considering the new definitions introduced in CS-23 Amdt. 5 §23.2005, the PC-24 is considered as equivalent to an aeroplane in the new normal category with:

    - Aeroplane certification level: “Level 4”
    - Aeroplane performance level “High speed”

13. All aircraft MSN P03 and 101 through 130 have been retrofitted with SB 42-002.

ADMINISTRATIVE SECTION

I. Acronyms & Abbreviations

AC	–	Advisory Circular
AD	–	Airworthiness Directive
AMM	–	Aircraft Maintenance Manual
C. of A.	–	Certificate of Airworthiness
CRI	–	Certification Review Item
CS	–	Certification Specification
EASA	–	European Union Aviation Safety Agency
EFIS	–	Electronic Flight Information System
FADEC	–	Full Authority Digital Engine Control
FIKI	–	Flight Into Known Icing
FOCA	–	Swiss Federal Office of Civil Aviation
IAS	–	Indicated Airspeed
ICAO	–	International Civil Aviation Organization
IFR	–	Instrument Flight Rules
KCAS	–	Calibrated Airspeed [knots]
KEAS	–	Equivalent Airspeed [knots]
KIAS	–	Indicated Airspeed [knots]
Lt	–	Litres
MAC	–	Mean Aerodynamic Chord
MSN		Manufacturer Serial Number
MMEL	–	Master Minimum Equipment List
NAA	–	National Aviation Authority
OSD	–	Operational Suitability Data
RVSM	–	Reduced Vertical Separation Minimum
TCDS	–	Type Certificate Data Sheet
VFR	–	Visual Flight Rules

II. Type Certificate Holder Record

PILATUS Aircraft Ltd.
Pilatusstrasse 1
6371 Stans
Switzerland

III. Change Record

Issue	Date	Changes
Issue 1	7 Dec 2017	Initial Issue.
Issue 2	17 Apr 2018	Update to include OSD-FCD and OSD-SIMD.
Issue 3	9 Oct 2018	Update for MTOW increase.
Issue 4	5 Nov 2020	Addition of CRI F-07 (special condition for Data Link Services Recording) and CRI O-01 (special condition for Steep Approach); addition of 10 seat commuter configuration.
Issue 5	12 Nov 2020	Correction of Note 11.
Issue 6	15 Mar 2021	OSD FCD table added.
Issue 7	19 Jan 2022	Update of the Pilatus address. Addition of CRI F-58 (special condition for Lithium Battery Installations) and CRI AWO-101 (special condition for CAT II requirements for CS 23 aeroplanes). OSD FCD table amended to add new training variant in line with latest issue of the OSD-FC report document reference 02423. Missing reference to CS-ACNS added to Note 5. Addition of new Note 12 on Aircraft Classification. Addition of new Note 13 on status of aircraft retrofitted by SB 42-002.
Issue 8	13 Oct 2023	Correction of engine model description (3,420 lbf maximum normal take-off thrust). Updated V_A and V_{SO} values for the Design Weight Increase major change. Addition of weights table for the Design Weight Increase major change. Updated CG range table to include the Design Weight Increase values.

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