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# TYPE-CERTIFICATE DATA SHEET

NO. EASA.A.594

**for**  
PC-24

**Type Certificate Holder**  
Pilatus Aircraft Ltd.

Ennetbürgerstrasse 101  
6370 Stans  
Switzerland

For models: PC-24



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## **SECTION A: PC-24**

### **A.I General**

Data Sheet No.: EASA.A.594

Issue: 3

Date: 11 Oct 2018

1. Type:  
Variant: PC-24
2. Airworthiness Category: CS-23, Commuter category
3. Type Certificate Holder: Pilatus Aircraft Ltd.  
Ennetbürgerstrasse 101, 6370 Stans  
Switzerland
4. Manufacturer: Pilatus Aircraft Ltd.  
Ennetbürgerstrasse 101, 6370 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: 07<sup>th</sup> Dec, 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 20<sup>th</sup> 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 Defuelling
CRI F-01	Battery Endurance Requirement
CRI F-03	Interaction of Systems and Structures
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-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-04	Towbarless towing loads

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 S/N: S/N 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 8 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:	16'850 mm	(55 ft 2 in)
Height:	5'400 mm	(17 ft 4 in)
Total Wing Area:	30.91 m <sup>2</sup>	(332.7 ft <sup>2</sup> )



4. Engines:

Model: 2 Williams International FJ44-4A-QPM Turbofan engines of 3,420 lbf maximum 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 operating Mach number)	0.81
	VA	(maneuvering speed) at MTOW	185 KEAS
	VC	(design cruising speed)	290 KEAS
Flap	VFE	(max. flap extended speed) 8° (Take-Off)	200 KEAS
		15° (Approach) Flap	200 KEAS
		33° (Landing) Flap	175 KEAS
	VLO	(maximum landing gear operating speed)	250 KEAS
Extension			250 KEAS
Retraction			81 KCAS
	VLE	(maximum landing gear extended speed)	
landing	VSO	(stall speed, ISA, sea level, max landing weight, configuration)	

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 101 - 130 Post SB 42-002, and 131 - Up*

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)

Maximum Weight:

For aircraft 101 - 130 Pre SB 42-002

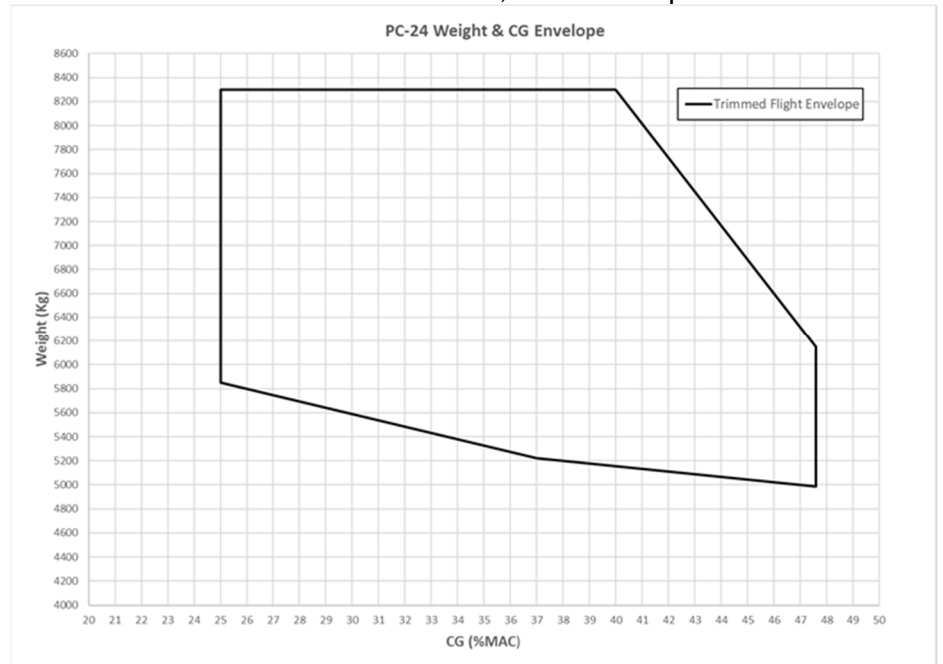
Taxi and ramp	8'050 kg	(17'750 lbs)
Take-off	8'005 kg	(17'650 lbs)
Landing	7'370 kg	(16'250 lbs)
Zero fuel	6'100 kg	(13'450 lbs)



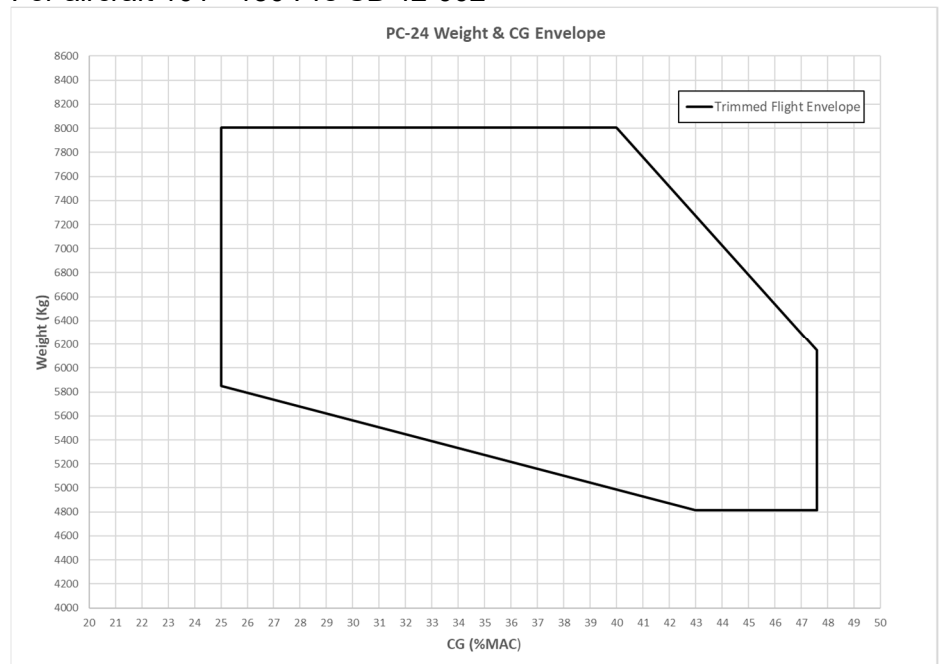


12. Centre of Gravity Range:

Figure shows the PC-24 Centre of Gravity (CG) limits, which accommodate all of the foreseen passenger and cargo loadings. For aircraft 101 - 130 Post SB 42-002, and 131 - Up



For aircraft 101 - 130 Pre SB 42-002



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: 8 PAX excluding pilot seats. (see Note 9)  
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:

S/N P03, 101 and up

Pilatus Document No. 02371

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

S/N 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:

S/N P03, 101 and up

Pilatus Report No. 02379

4. Flight Crew Operating Manual (FCOM)

S/N 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:

S/N P03, 101 and up

Pilatus Report No. 02430

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

S/N P03, 101 and up

Pilatus Report No. 02431

7. RVSM capability for PC-24 S/N P03, 101 and subsequent:

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 0, 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

3. Simulator Data

Validation Data Roadmap (VDR) report ER-24-001168, latest approved revision

## **ADMINISTRATIVE SECTION**

### **I. 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.o.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. 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 iaw. CS-23.1419 and SC F-62.
7. The PC-24 S/N P03, 101 and subsequent equipped with Honeywell APEX system are RVSM capable.
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. Maximum number is 8 PAX in the cabin. An optional fit allows two additional infants to be carried at the first seating row on the left and right sides. During single pilot operation, the pilot occupies the left hand cockpit seat and an additional passenger may occupy the right hand cockpit seat



## **SECTION ADMINISTRATIVE**

### **I. Acronyms & Abbreviations**

A.C. – Advisory Circular  
A.D. – Airworthiness Directives  
AMM - Aircraft Maintenance Manual  
C.o.A. – Certificate of Airworthiness  
CRI - Certification Review Item  
CS - Certification Specification  
EASA - European Aviation Safety Agency  
EFIS – Electronic Flight Information System  
FADEC – Full Authority Digital Engine Control  
FIKI - Flight Into Known Icing  
FOCA - 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  
MMEL – Master Minimum Equipment List  
N.A.A. – 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.  
P.O. Box 992, 6371 Stans  
Switzerland

### **III. Change Record**

<b>Issue</b>	<b>Date</b>	<b>Changes</b>
Issue 1	7 Dec 2017	Initial Issue
Issue 2	17 Apr 2018	Update to include OSD-FCD and OSD-SimD
Issue 3	11 Oct 2018	Update to take into account MTOW increase

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