

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

A78EU
Revision 35
PILATUS
PC-12
PC-12/45
PC-12/47
PC-12/47E
July 07, 2021

TYPE CERTIFICATE DATA SHEET No. A78EU

This data sheet, which is a part of Type Certificate No. A78EU, prescribes conditions and limitations under which the product for which the Type Certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder. PILATUS AIRCRAFT LTD.
Ennetbürgenstrasse 101
CH-6370 STANS
SWITZERLAND

I. Model PC-12, Normal Category, approved July 15, 1994.

Engine. Pratt & Whitney PT6A-67B

Fuel. Approved fuels in accordance with AFM 01973-001 or AFM 02211 as applicable.

Engine Limits.

	Shaft Power	Torque	N ₁ Gas Generator Speed	Prop Shaft Speed	Maximum Observed Inter Turbine Temp.
	shp	PSI	%	RPM	°C
Take-off	1200	44.34	104	1700	800
Max. climb/Max. cruise	1000	36.95	104	1700	760
Starting (5 seconds)	---	---	---	---	1000
Transient (20 seconds)	---	61.00	104	1870	870

Note: 100% Gas Generator Speed = 37,468 RPM

Propeller and Propeller Limits. Hartzell HC-E4A-3D hub with Hartzell E10477K aluminum blades; four blade constant speed type. (SEE NOTE 12)

Spinner: Hartzell D5500-1 (Aluminum)

Diameter: 104 in (2.642 m) to 105 in (2.667 m)
cropping of blade tips not permitted.

Pitch settings (measured at 42 in. station)

Fine pitch 19.0°

Min. pitch in flight 6.0°

Max. reverse pitch -17.5°

Feathered 79.6°

Stabilized ground operation is prohibited between 350 and 950 RPM.

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<u>Airspeed Limits (EAS).</u>	Max. operating speed	V _{MO} 240 kts
	Max. operating Mach No.	M _{MO} 0.48
	Max. diving speed	V _D 280 kts M _D 0.60
	Max. maneuvering design speed	V _A 170 kts
	Max. maneuvering operating speed	V _O 154 kts at 4100 kg (9039 lbs) V _O 136 kts at 3200 kg (7060 lbs) V _O 123 kts at 2600 kg (5730 lbs)
<u>Center of Gravity Limits.</u>	At 4100 kg (9039 lbs) 27% MAC to 44% MAC	
	<u>Forward cg limit varies linearly between: (landing gear extended)</u>	
	4100 kg (9039 lbs)	27% MAC
	3700 kg (8157 lbs)	17.8% MAC
	2700 kg (5952 lbs) and less	13% MAC
	<u>Rear cg limit varies linearly between: (landing gear retracted)</u>	
	4100 kg (9039 lbs)	44% MAC
	3600 kg (7937 lbs)	46% MAC
	3000 kg (6614 lbs)	46% MAC
	2550 kg (5622 lbs) and less	20% MAC
<u>Datum.</u>	3000 mm (118 in.) forward of firewall (frame no. 10).	
<u>Leveling Means.</u>	Cabin Seat Rails (see Section 8 of the Airplane Maintenance Manual).	
<u>Maximum Weight.</u>	Ramp weight 4120 kg (9083 lbs) Take-off weight 4100 kg (9039 lbs) Landing weight 4100 kg (9039 lbs) Max. zero fuel weight 3700 kg (8159 lbs)	
<u>Minimum Crew.</u>	One pilot.	
<u>Number of Seats.</u>	9 PAX and 2 pilot seats (for seat locations see Airplane Flight Manual, Section 6, W & B).	
<u>Maximum Baggage.</u>	180 kg (400 lbs) (baggage compartment at rear of cabin).	
<u>Maximum Loading.</u> (Combi version)	1000 kg/m ² (205 lb/ft ²) on seat rails 600 kg/m ² (125 lb/ft ²) on cabin floor (for loading limitations/instructions see Section 6 of the Airplane Flight Manual).	
<u>Fuel Capacity</u> (Specific gravity 0.806 kg/ltr)	<u>Total</u>	<u>Usable</u>
	1540 ltr (1241 kg) (406 US gal)	1516 ltr (1222 kg) (400 US gal)
		5.91 m (233 in) aft of datum
		1522 ltr (1226 kg) (see NOTE 1) (402 US gal)
<u>Oil Capacity.</u>	<u>Total</u>	<u>Arm</u>
	13,6 ltr (3.6 US gal)	2.41 m (95 in) aft of datum

Control Surfaces

Wing flap (left/right asymmetry 1°)	15° + 0° /-1.5° Take-off	39.5° +/- 0.5° Landing
Ailerons	30° +/- 1° Up	10° +/- 1° down
Elevator	28° +/- 1° Up	15° +/- 1° down
Stabilizer (trim) (with respect to stabilizer leading edge)	2.5° + 0.7° /- 0.2° up	7.5° + 0.7° / - 0.2° down
Rudder (from centerline and measured horizontally)	35° +/- 1° right	25° +/- 1° left
Rudder tab (trim)	7.5° + 1° /- 1.5° right	13° + 1°/- 1.5° left
Aileron tab (trim)	16.5° + /-1° up	16.5° +/- 1° down

Stick Pusher System.

Stick shaker/stick pusher system, signaled by AOA vanes on left and right wing leading edges.

Serial Numbers Eligible.

SN 101 and up (See NOTE 5, NOTE 10 and NOTE 11).

Import Requirements- All Models.

- a. The FAA can issue a U.S. airworthiness certificate based on an NAA Export Certificate of Airworthiness (Export C of A) signed by a representative of the Swiss Federal Office of Civil Aviation (FOCA) on behalf of the European Community. The Export C of A should contain the following statement: 'The aircraft covered by this certificate has been examined, tested, and found to comply with U.S. airworthiness regulations 14 CFR Federal Aviation Regulations Part 23 U.S. Type Certificate No. A78EU and to be in a condition for safe operation.'
- b. An airplane maintenance manual in compliance with FAR 23.1529 must be furnished before delivery of the first airplane or issuance of standard certificate of airworthiness whichever occurs later.

Refer to the applicable bilateral agreement to verify eligibility for import into the United States of both new and used aircraft based on the scope of the agreement, to identify any required statements by the exporting authority on the export certificate of airworthiness (or equivalent document), and for procedures for coordinating exceptions to conformity statements on these documents. Refer to FAA Order 8130.2, *Airworthiness Certification of Aircraft*, for requirements for issuance of an *airworthiness certificate* for imported aircraft.

Certification Basis.

- 1) 14 CFR Sections 21.29, 21.183(c) and 14 CFR 23, Normal Category, effective February 4, 1991, including Amendments 23-1 through 23-42 and Section 23.1305(c)3) of Amendment 23-43 and Section 23.1507 of Amendment 23-45 and Section 23.1311 of Amendment 23-49 and
- 2) 14 CFR Section 36, effective November 18, 1969, including Amendments 36-1 through amendment in effect at the time of U.S. Type Certification, and
- 3) 14 CFR Section 34, effective September 10, 1990, and
- 4) Equivalent Level of Safety,
 - a) ACE-94-8 of June 21, 1994, Spin demonstration, FAR 23.221 a)2)
 - b) Cabin pressure indicator, FAR 23.841b) 6). See NOTE 8.
- 5) Section 611(b) of the FAA Act of 1958
- 6) Certification Maintenance Requirement (CMR), manual pitch trim system annunciation
- 7) Special Conditions: High Energy Radiated Electromagnetic Fields, (HERF), Number 23-ACE-46, effective date May 29, 1990
- 8) Approved for Flight Into Known Icing. See NOTE 4.

The Swiss Federal Office of Civil Aviation (FOCA) originally type certificated this aircraft under its type certificate Number F-56-30. The FAA validated this product under U.S. Type Certificate Number A78EU. Effective June 23, 2006, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Switzerland. The EASA TCDS No. EASA.A.089.

Equipment

The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.

In addition the following is required:

Airplane Flight Manual

(including Equipment list and applicable supplements)

- S/N 101-400: (except S/N 321) Report No. 01973-001
- S/N 321 and 401 and subsequent Report No. 02211

Service Information Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before June 23, 2006 – Swiss Federal Office of Civil Aviation (FOCA).

- Service bulletins,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available Documents for the PILATUS PC-12 are:

Airplane Flight Manual	For S/N 101 – 400 except 321: Doc. No. 01973-001 Revision 2, dated February 14, 1995 or later FOCA approved revisions.
	For S/N 321 and 401 and subsequent: Doc No. 02211 (PC-12 data is contained in AFMS No. 25; Doc. No. 02211/9-25)
Aircraft Maintenance Manual (Chapter 4 FOCA approved)	Doc. No. 02049.
Structural Repair Manual	Doc. No. 02050.
Illustrated Parts Catalogue	Doc. No. 02051.

II. Model PC-12/45 (Normal Category), approved July 31, 1996.

The data given above is valid except where mentioned below:

<u>Airspeed Limits (EAS):</u>	Max. diving speed	V _D 290 kts
		M _D 0.62 (S/N 101 – 683)
		M _D 0.58 (S/N 684 onwards)
	Max. maneuvering operating speed V _O	161 kts at 4500 kg)
	Stall speed (at TOW) Flaps up	93 kts (CAS)
	(engine running flight idle) Flaps down	65 kts (CAS)

<u>Center of Gravity Limits.</u>	At 4500 kg 30% MAC to 43% MAC
	Forward cg limit varies linearly between: (landing gear extended)
	4500 kg (9921 lbs) 30% MAC
	3700 kg (8157 lbs) 18% MAC
	2600 kg (5732 lbs) and less 13% MAC
	Rear cg limit varies linearly between: (landing gear retracted)
	4500 kg (9921 lbs) 43% MAC
	3600 kg (7937 lbs) 46% MAC
	3000 kg (6614 lbs) 46% MAC
	2600 kg (5732 lbs) and less 20% MAC

<u>Maximum Weights.</u>	Ramp weight	4520 kg (9965 lbs)
	Take-off weight	4500 kg (9921 lbs)
	Landing weight	4500 kg (9921 lbs)
	Max. zero fuel weight	4100 kg (9039 lbs)

Control Surfaces.

Wing flaps 15° +0°/-1.5° Normal Take-off
 30° +0°/-1.5° Short Take-off
 39.5° +/-0.5° Landing
 (left/right asymmetry 1°)

S/N 684 Onwards:

Ailerons	26.5° +/- 0.5° Up	13° +/- 0.5° down
Aileron tab	13.9° +/- 1.0° up	14.5° +/- 1.0° down
(trim function only – left hand tab)		
Aileron tab	15.5° +/- 1.0° up	15.8° +/- 1.0° down
(balance function only – both tabs)		
Aileron tab	29.3° +/- 1.0° up	28.4° +/- 1.0° down
(combined trim and balance function – left hand tab)		

When the ailerons are in the neutral position, both tabs are deflected 5° +/- 0.5° up.

Certification Basis

- 1) 14 CFR Sections 21.29, 21.183(c) and 14 CFR 23, Normal Category, effective February 4, 1991, including Amendments 23-1 through 23-42 and Section 23.1305(c)3) of Amendment 23-43 and Section 23.49(c) and 23.562(d) of Amendment 23-44 Section 23.479(b) & c) and Section 23.1507 of Amendment 23-45 and Section 23.1311 of Amendment 23-49
- 2) 14 CFR Section 36, effective November 18, 1969, including Amendments 36-1 through amendment in effect at the time of U.S. Type Certification, and
- 3) 14 CFR Section 34, effective September 10, 1990, and
- 4) Equivalent level of Safety,
 - a) ACE-94-8 of June 21, 1994, Spin demonstration, FAR 23.221 a)2)
 - b) Cabin pressure indicator, FAR 23.841b) 6). See NOTE 8.
- 5) Section 611(b) of the FAA Act of 1958
- 6) Certification Maintenance Requirement (CMR), manual pitch trim system annunciation
- 7) Special Conditions: High Energy Radiated Electromagnetic Fields, (HERF), Number 23-ACE-46, effective date May 29, 1990
- 8) Approved for Flight Into Known Icing. See NOTE 4.

The Swiss Federal Office of Civil Aviation (FOCA) originally type certificated this aircraft under its type certificate Number F-56-30. The FAA validated this product under U.S. Type Certificate Number A78EU. Effective June 23, 2006, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Switzerland. The EASA TCDS No. EASA.A.089.

Service Information.

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before June 23, 2006 – Swiss Federal Office of Civil Aviation (FOCA).

- Service bulletins,
 - Structural repair manuals,
 - Vendor manuals,
 - Aircraft flight manuals, and
 - Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available Documents for the PILATUS PC-12/45 are:

For S/N 101 – 400, except 321: Airplane Flight Manual Supplement No. 8 (Doc. No. 01973-001 / 9-08) Initial issue, or later FOCA approved revisions.

For S/N 321 and S/N 401 and subsequent: Airplane Flight Manual Report No. 02211
Initial issue or later FOCA approved revisions.

III. Model PC-12/47 (Normal Category), approved December 23, 2005.

The data given for model PC-12 is valid except where mentioned below:

<u>Airspeed Limits (EAS):</u>	Max. diving speed	V _D 290 kts M _D 0.58	
	Max. maneuvering operating speed V _O		163 kts at 4740 kg (10450 lbs)
	Stall speed (at TOW) Flaps up		95 kts (CAS)
	(engine running flight idle) Flaps down		67 kts (CAS)
<u>Center of Gravity Limits.</u>	At 4740 kg 30% MAC to 42.2% MAC		
	Forward cg limit varies linearly between: (landing gear extended)		
	4740 kg (10450 lbs)	30% MAC	
	4500 kg (9921 lbs)	30% MAC	
	3700 kg (8157 lbs)	18% MAC	
	2600 kg (5732 lbs) and less	13% MAC	
	Rear cg limit varies linearly between: (landing gear retracted)		
	4740 kg (10450 lbs)	42.2% MAC	
	4500 kg (9921 lbs)	43% MAC	
	3600 kg (7937 lbs)	46% MAC	
<u>Maximum Weights.</u>	Ramp weight	4760 kg (10495 lbs)	
	Take-off weight	4740 kg (10450 lbs)	
	Landing weight	4500 kg (9921 lbs)	
	Max. zero fuel weight	4100 kg (9039 lbs)	
<u>Control Surfaces.</u>	Wing flaps	15° +0°/-1.5° Normal Take-off 30° +0°/-1.5° Short Take-off 39.5° +/-0.5° Landing (left/right asymmetry 1°)	
	Ailerons	26.5° +/- 0.5° Up	13° +/- 0.5° down
	Aileron tab	13.9° +/- 1.0° up	14.5° +/- 1.0° down
	(trim function only – left hand tab)		
	Aileron tab	15.5° +/- 1.0° up	15.8° +/- 1.0° down
	(balance function only – both tabs)		
	Aileron tab	29.3° +/- 1.0° up	28.4° +/- 1.0° down
	(combined trim and balance function – left hand tab)		
	When the ailerons are in the neutral position, both tabs are deflected 5° +/- 0.5° up.		
<u>Certification Basis</u>	1) 14 CFR Sections 21.29, 21.183(c) and 14 CFR 23, Normal Category, effective February 4, 1991, including Amendments 23-1 through 23-42 and Section 23.1305(c)3) of Amendment 23-43 and Section 23.49(c) and 23.562(d) of Amendment 23-44		
	Section 23.479(b) & c) and Section 23.1507 of Amendment 23-45 and Section 23.1311 of Amendment 23-49		
	2) 14 CFR Section 36, effective November 18, 1969, including Amendments 36-1 through amendment 36-27, effective September 6, 2005,		
	3) 14 CFR Section 34, effective September 10, 1990, including amendments 34-1 as amended through Amendment 34-3 effective February 3, 1999;		
	4) Equivalent level of Safety findings per provision of 14 CFR 21.21(b)(1):		
	a) ACE-94-8 of June 21, 1994, Spin demonstration, FAR 23.221 a)2) as extended by FAA memorandum dated November 29, 2005.		
	b) ACE-05-18 of November 29, 2005, Cabin pressure indicator, FAR 23.841(b) 6)		
	5) Special Conditions: High Energy Radiated Electromagnetic Fields, (HERF), Number 23-ACE-46, effective date May 29, 1990		
	6) Approved for Flight Into Known Icing. See NOTE 4.		
	7) Section 611(b) of the FAA Act of 1958		

8) Certification Maintenance Requirement (CMR), manual pitch trim system annunciation

Date of Application for U.S. Amended Type Certificate for PC-12/47 model December 1, 2004.

The Swiss Federal Office of Civil Aviation (FOCA) originally type certificated this aircraft under its type certificate Number F-56-30. The FAA validated this product under U.S. Type Certificate Number A78EU. Effective June 23, 2006, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Switzerland. The EASA TCDS No. EASA.A.089.

Service Information

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before June 23, 2006 – Swiss Federal Office of Civil Aviation (FOCA).

- Service bulletins,
- Structural repair manuals,
- Vendor manuals,
- Aircraft flight manuals, and
- Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available Documents for the PILATUS PC-12/47 are:

Airplane Flight Manual Report No. 02211,
Initial issue or later FOCA approved revisions.
(specific PC-12/47 data is contained in AFM Supplement No. 33)

Aircraft Maintenance Manual Doc. No. 02049 Revision 17, dated 31 Jan 2006 or higher. (Chapter 4 FAA and FOCA approved)

IV. Model PC-12/47E (Normal Category), approved March 28, 2008.

The data given for model PC-12 is valid except where mentioned below:

Engine. Pratt & Whitney PT6A-67P

Fuel. Approved fuels in accordance with AFM 02277

Engine Limits.

	Shaft Power	Torque	N ₁ Gas Generator Speed	Prop Shaft Speed	Maximum Observed Inter Turbine Temp.
	shp	PSI	%	RPM	°C
Take-off	1200	44.34	104	1700	850
Max. climb	1200	44.34	104	1700	820
Max. cruise	1000	36.95	104	1700	820
Starting (5 seconds)	---	---	---	---	1000
Transient (20 seconds)	---	61.00	104	1870	870

Engine.

Pratt & Whitney PT6E-67XP (NOTE 16)

Fuel.

Approved fuels in accordance with AFM 02406

	Shaft Power	Torque	N ₁ Gas Generator Speed	Prop Shaft Speed	Maximum Observed Inter Turbine Temp.
	shp	PSI	%	RPM	°C
Take-off	1200	44.84	104	1700	850
Max. climb	1200	44.84	104	1700	825
Max. cruise	1100	40.63	104	1700	820
Starting (5 seconds)	---	---	---	---	1000
Transient (20 seconds)	---	61.00	104	1870	900

Propeller and Propeller Limits.

Hartzell HC-E4A-3D hub with Hartzell E10477SK Shot Peened aluminum blades; four blade constant speed type. (See NOTE 12)

Hartzell HC-E5A-3A hub with NC10245B, 5 Carbon composite blades (See NOTE 15)

Hartzell HC-E5A-31A hub with NC10245B, 5 Carbon composite blades (See NOTE 16)

Spinner: Hartzell D5500-1 (Aluminum) applicable to HC-E4A-3D hub.

Spinner: Hartzell 105820 (Aluminum), applicable to HC-E5A-3A and HC-E5A-31A hubs.

Diameter: 104 in (2.642 m) to 105 in (2.667 m)
cropping of blade tips not permitted.

Pitch settings (measured at 42 in. station)

	4-Blade propeller	5-Blade propeller
Fine pitch	19.0°	14.7°
Min. pitch in flight	6.0°	6.0°
Max. reverse pitch	-17.5°	-17.5°
Feathered	79.6°	80.0°

Stabilized ground operation is prohibited between 350 and 950 RPM.

Stabilized ground operation is prohibited between 350 and 900 RPM (See NOTE 16).

Airspeed Limits (EAS):Max. diving speed V_D 290 kts
 M_D 0.58Max. maneuvering operating speed V_O 163 kts at 4740 kg (10450 lbs) V_O (See Note 16) 166 kts at 4740 kg (10450 lbs)

Stall speed (at TOW) Flaps up 95 kts (CAS)

(engine running flight idle) Flaps down 67 kts (CAS)

Center of Gravity Limits.

At 4740 kg 30% MAC to 42.2% MAC

Forward cg limit varies linearly between: (landing gear extended)

4740 kg (10450 lbs) 30% MAC

4500 kg (9921 lbs) 30% MAC

3700 kg (8157 lbs) 18% MAC

2600 kg (5732 lbs) and less 13% MAC

Rear cg limit varies linearly between: (landing gear retracted)

4740 kg (10450 lbs) 42.2% MAC

4500 kg (9921 lbs) 43% MAC

3600 kg (7937 lbs) 46% MAC

3000 kg (6614 lbs) 46% MAC

2600 kg (5732 lbs) and less 20% MAC

Maximum Weights.

Ramp weight	4760 kg (10495 lbs)
Take-off weight	4740 kg (10450 lbs)
Landing weight	4500 kg (9921 lbs)
Max. zero fuel weight	4100 kg (9039 lbs)

Control Surfaces.

Wing flaps	15° +0°/-1.5°	Normal Take-off
	30° +0°/-1.5°	Short Take-off
	39.5° +/-0.5°	Landing
	(left/right asymmetry 1°)	
Ailerons	26.5° +/- 0.5° Up	13° +/- 0.5° down
Aileron tab	13.9° +/- 1.0° up	14.5° +/- 1.0° down
(trim function only – left hand tab)		
Aileron tab	15.5° +/- 1.0° up	15.8° +/- 1.0° down
(balance function only – both tabs)		
Aileron tab	29.3° +/- 1.0° up	28.4° +/- 1.0° down
(combined trim and balance function – left hand tab)		
When the ailerons are in the neutral position, both tabs are deflected 5° +/- 0.5° up.		

Certification Basis

- 1) 14 CFR Sections 21.29, 21.183(c) and 14 CFR 23, Normal Category, effective February 4, 1991, including Amendments 23-1 through 23-42 and:

[FAR 23 Paragraph (Amdt level)]

23.49c (23-44)	23.143 c (23-50)	23.301 (23-48)
23.305 a (23-45)	23.335 a,b,c,d (23-48)	23.361 a,b2 (23-45)
23.371 a (23-48)	23.479 b,c (23-45)	23.561 b2-3,c3 (23-48)
23.562 d (23-44)	23.562 d1 (23-50)	23.571 a (23-45)
23.572 a1,b1 (23-45)	23.607 c (23-48)	23.613 (23-45)
23.629 a,b,c,d,e,f2 (23-48)	23.773 a1-2 (23-45)	23.1303 a,b,c,d,e,f (23-49)
23.1305 c3 (23-43)	23.1307 (23-49)	23.1311 (23-49)
23.1322 e (23-43)	23.1323 c (23-49)	23.1326 a,b (23-49)
23.1329 (23-49)	23.1331 a,b1-2, c (23-43)	23.1351 b2-3,c,c1-5,g (23-49)
23.1353 h (23-49)	23.1357 a,e (23-43)	23.1359 (23-49)
23.1361 a,b,c (23-49)	23.1365 b,c,c1,d,e,f (23-49)	23.1431 a,b,c,d,e (23-49)
23.1507 (23-45)	23.1525 (23-45)	23.1543 c (23-50)
23.1555 e2 (23-50)		

Additionally airplanes where the Magnetic Standby Compass is not installed (Note 15) comply with 23.1303 (c) at 23-62

- 2) 14 CFR Section 36, effective November 18, 1969, including Amendments 36-1 through amendment 36-28, effective January 4, 2006,
- 3) 14 CFR Section 34, effective September 10, 1990, including amendments 34-1 as amended through Amendment 34-3 effective February 3, 1999;
- 4) Equivalent level of Safety findings per provision of 14 CFR 21.21(b)(1):
 - a) ACE-94-8 of June 21, 1994, Spin demonstration, FAR 23.221 a)2) as extended by FAA memorandum dated November 7, 2007.
 - b) ACE-05-18 of November 29, 2005, Cabin pressure indicator, FAR 23.841b) 6) as extended by FAA memorandum dated November 7, 2007.
 - c) ACE-07-14 of January 7, 2008, Probes OFF Caution, FAR 23.1326(b)(1)
 - d) ACE-07-15 of January 8, 2008, ASI Flap Markings, FAR 23.1545(b)(4)
 - e) ACE-08-02 of February 26, 2008, Circuit Protective Devices, FAR 23.1357(b)
- 5) Special Conditions:
 - a) Protection of Systems for HIRF, Number 23-216-SC, effective date November 30, 2007
- 6) Approved for Flight Into Known Icing. See NOTE 4.
- 7) Section 611(b) of the FAA Act of 1958
- 8) Certification Maintenance Requirement (CMR), manual pitch trim system annunciation

Date of Application for U.S. Amended Type Certificate for PC-12/47E model December 6, 2004.

The Swiss Federal Office of Civil Aviation (FOCA) originally type certificated this aircraft under its type certificate Number F-56-30. The FAA validated this product under U.S. Type Certificate Number A78EU. Effective June 23, 2006, the European Aviation Safety Agency (EASA) began oversight of this product on behalf of Switzerland. The EASA TCDS No. EASA.A.089.

Certification Basis (NOTE 16)

[FAR 23 Paragraph (Amdt level)] Below are the areas of change that are at a higher amendment than the PC- 12/47E and are the new certification basis for airplanes with the Pratt and Whitney PT6E-67XP engine.

23.63 (23-62)	23.69 (23-50)	23.147 (23-50)
23.175 (23-50)	23.177 (23-62)	23.181 (23-62)
23.337 (23-48)	23.341 (23-48)	23.347 (23-48)
23.361 (23-45)	23.443 (23-48)	23.572 (23-48)
23.629 (23-48)	23.672 (23-45)	23.677 (23-49)
23.905 (23-59)	23.907(c) (23-59)	23.1306 (23-61)
23.1308 (23-57)	23.1309 (23-62)	23.1310 (23-62)
23.1321 (23-49)	23.1365 (23-49)	23.1589 (23-50)

- 2) 14 CFR Section 34, effective September 10, 1990, including amendments 34-1 as amended through Amendment 34-5A effective October 23, 2013;
- 3) 14 CFR Part 21.16 Special Conditions (SC) issued in accordance with 14 CFR Part 11:
 - (a) SC 23-294-SC effective August 15, 2019 - Autothrust System –signed 8/1/2019;
 - (b) SC 23-295-SC effective August 15, 2019 - Electronic Engine Control (EEC) – 8/8/2019
- 4) Equivalent Safety Findings (ELOS) per 21.21(b)(1) for the following subjects:
 - (a) ELOS AT00923CE-A-P-3 dated August 16, 2019, Digital Only Display - Powerplant Indications, 14 CFR 23.1305(e) amendment 23-34; 23.1549(a), (b), and (c), amendment 23-28;
 - (b) ELOS AT00923CE-A-P-4 dated August 16, 2019, Use of Interconnected Fuel Tanks without Tank Airspaces, 14 CFR 23.975(a)(4), amendment 23-29;
 - (c) ELOS AT00923CE-A-S-4 dated August 16, 2019, AutoThrottle (AT) Engage When Not Installed, 14 CFR 23.1301(b), amendment 23-20; 23.1555(a), amendment 23-21;

Service Information

Each of the documents listed below must state that it is approved by the European Aviation Safety Agency (EASA) or – for approvals made before June 23, 2006 – Swiss Federal Office of Civil Aviation (FOCA).

- Service bulletins,
 - Structural repair manuals,
 - Vendor manuals,
 - Aircraft flight manuals, and
 - Overhaul and maintenance manuals.

The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:

- The documents change the limitations, performance, or procedures of the FAA approved manuals; or
- The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to EASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

Available Documents for the PILATUS PC-12/47E are:

Airplane Flight Manual Report No. 02277, Revision 6, dated March 26, 2008 or later EASA approved revisions. (See Note 13 and Note 15)

Aircraft Maintenance Manual Doc. No. 02300, 12-B-AM-00-00-00-1, dated April 11, 2008, or later EASA approved revisions. (Chapter 4 is FAA and EASA approved) (See Note 13 and Note 15)

MSN 1720, 2001 and subsequent (Note 16) and (Note 17)

Airplane Flight Manual Report No. 02406, Issue 002 Revision 00, dated October 14,

2019 or later EASA approved revisions.
Airplane Flight Manual Temporary Revision Report No. AFM TR 02406 01 dated 26 November 2019 or later EASA approved revisions.
Aircraft Maintenance Manual Doc. No. AMM 02436, Issue 01, Revision 00, dated Nov. 22, 2019 or later EASA approved revisions. (Chapter 4 is FAA and EASA approved)

NOTES

- NOTE 1. 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. The certificated empty weight and corresponding center of gravity locations must include the following:
- a) unusable fuel of 19.6 kg (43.2 lbs) at 5.73 m (225.6 in) on S/N 101 up to and including S/N 140. unusable fuel of 14.9 kg (32.9 lbs) at 5.73 m (225.6 in) from S/N 141 on onwards.
 - b) engine oil of 9.2 kg (20.3 lbs) at 2.41 m (95.27 in.)
- NOTE 2. Airplane operation must be in accordance with the EASA/FOCA-approved Airplane Flight Manual listed above. All placards listed in Section 2 of the AFM must be displayed in the appropriate location.
- NOTE 3. Airworthiness Limitations are contained in the FOCA/EASA approved Chapter 4 of the PC-12, PC-12/45, PC-12/47 & PC-12/47E Aircraft Maintenance Manual. These Limitations may not be changed without EASA and FAA approval.
- NOTE 4. The models PC-12 and PC-12/45 up to S/N 683 may be operated in known icing conditions when equipped in accordance with Pilatus Modification PIL 12/00/001, Rev. 1, or later FOCA/EASA approved revision. The models PC-12/45, PC-12/47, and PC-12/47E from S/N 684 onwards are approved for operation in known icing conditions. S/N 545 is also approved for operation in known icing conditions.
- NOTE 5. The basic version PC-12 (S/N 101 - 683) may be converted to a version PC-12/45 by executing PILATUS Service Bulletin No. 04-001.
- NOTE 6. Only interior configurations described in the official Pilatus AFM/POH are approved for installation in the PC-12, PC-12/45, PC-12/47 and PC-12/47E aircraft. These configurations have been shown to meet the dynamic and HIC test requirements of FAR 23.562. Any alterations to these approved interior layouts must be shown to meet FAR 23.562.
- NOTE 7. All PC-12 models are eligible for import (with FOCA export certificate of airworthiness) into the USA in the no cabin interior configuration option installation per Pilatus Document 500.20.12.399 for ferry flight delivery to the USA, but carriage of passengers (other than those essential to the mission) in this configuration is prohibited.
- NOTE 8. An ELOS memorandum was inadvertently missed on the original PC-12 model and PC-12/45 model, but was evaluated during the validation of the PC-12/47. See FAA memorandum dated December 9, 2005 for details.
- NOTE 9. The PC-12/45 model incorporated an aerodynamic improvement modification (AIM) type design change that was approved at the same time the PC-12/47 model was approved. This modification is for production aircraft only and includes: modified wingtips, modified dorsal and ventral fins and modified ailerons (reduction of roll control forces).
- NOTE 10. Starting with Manufacture Serial Number (MSN) 684, and up to MSN 999, can be either a PC-12/45 with the AIM type design change or a PC-12/47 model.
- NOTE 11. Starting with Manufacture Serial Number (MSN) 1001 and subsequent will only be a PC-12/47E model. MSN 545 is also a PC-12/47E model.
- NOTE 12. Only the Hartzell E10477SK Shot Peened aluminum blades with the Hartzell HC-E4A-3D hub is allowed on the PC-12/47E model. This Shot Peen Hartzell E10477SK propeller can be used on the PC-12, PC-12/45 and PC-12/47 airplane, but the Hartzell E10477K "non-shot peened" cannot be used on the PC-12/47E airplane. See the appropriate Pilatus Airworthiness limitation sections.
- NOTE 13. PC-12/47E MSN 545 and MSN 1001 up to 1944: All airplanes equipped with Honeywell APEX system are RVSM capable provide the operator incorporates and follows airplane flight manual supplement (AFMS) No. 4 Revision 1 dated May 28, 2009 or later version and Airplane Maintenance Manual document number 02300 Revision 2, dated June 3, 2009 or later AMM version.

- NOTE 14. PC-12/47E MSN 1300, MSN 1451 up to 1944: These airplanes are fitted with the Electromechanical Landing Gear (eLDG) and must be operated and maintained in accordance with the Airplane Flight Manual, document no. 02277, Supplement 11, issue dated March 2, 2012 or later revisions and Airplane Maintenance Manual, document number 02300, Airworthiness Limitations 12-B-04-00-00-00A-000A-A, dated November 26, 2013 or later EASA and FAA approved revisions.
- NOTE 15. The PC-12/47E aircraft is Transmitting-PED tolerant.
PC-12/47E MSN 1576 and subsequent as well as aircraft which have SB 34-042 (Introduction of the L3 ESIS) embodied, can have the standby magnetic compass removed (23.1303(c) at 23-62).
- PC-12/47E MSN 1576 up to 1944: These airplanes are eligible to be fitted with the Hartzell 5-Blade Composite Propeller. The aircraft must be operated in accordance with the Airplane Flight Manual, document no. 02277 revision 15, dated November 6, 2015 or later versions and airplane Maintenance Manual, document number 02300 Revision 14, dated November 6, 2015 or later EASA and FAA approved revisions.
- NOTE 16. The PC-12/47E MSN 1720, MSN 2001 and subsequent: These airplanes are fitted with:
- Pratt and Whitney PT6E-67XP engine with Electronic Engine Control (EEC);
 - APEX Build 12 or later versions, providing functions such as Autothrust (Optional), Tactile Feedback and Emergency Descent Mode and Low Propeller Speed (Optional);
 - New Executive Seats and Larger cabin windows;
 - Revised Fuel System enabling the use of fuel without anti-icing additives within the certified outside temperature limits of the airplane with the fuel system basic architecture and means of operation are maintained;
 - Electromechanical Landing Gear (eLDG).
 - The airplanes are RVSM capable.
 - These airplanes are also Transmitting-PED tolerant.
- This MSN range of airplanes must be operated and maintained in accordance with the Airplane Flight Manual, document no. 02406 issue 02, revision 00 issue date October 14, 2019 or later revisions. Aircraft with the optional Low Propeller Speed in accordance with the AFM Supplement 02439 issue 01, revision 00 issue date October 14, 2019 or later revisions. This MSN range of airplanes must use Airplane Maintenance Manual, document no. 02436, Airworthiness Limitations 12-C-04-00-00-00A-000A-A, dated August 28, 2019 or later EASA and FAA approved revisions.
- NOTE 17. On November 21, 2019, the FAA accepted the complete set of ICAs for MSN 1720, MSN 2001 and subsequent. The ALS section of the ICA, chapter 4, dated August 28, 2019 was FAA approved on September 04, 2019 which was before the FAA approval for these type design changes and allowed per 14 CFR part 21.50(b).
- NOTE 18. Revision 34 of this TCDS was issued to correct a typographical error and correctly identify the PC-12 models in the title block of this TCDS and corresponding individual model sections by not including "PILATUS" before each model number to correctly match the actual FAA type certificate.

...END...