PILATUS PC-12 MODEL VARIANTS

POPA Members Guide

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The PC-12 was originally designed by Pilatus to be a unique niche aircraft to serve as a highly efficient platform in the utility, cargo, commuter airline, and air ambulance markets.

Pilatus publicly announced development of the PC-12 at the 1989 National Business Aviation Association convention in Atlanta, Georgia, and the first flight of the prototype aircraft occurred on May 31, 1991. Following an extensive flight test program that included compliance with new, more stringent requirements for flight into known icing conditions, the PC-12 was certified by the Swiss Federal Office of Civil Aviation (FOCA) on March 30, 1994, followed by FAA certification on July 15, 1994.

While the original target market segments were early adopters of the PC-12, the size of the cabin, the unique cargo door, and the ability to be flown by a single pilot caught the attention of owner-pilots looking for a rugged personal aircraft that was the aerial equivalent of an SUV. To serve this market, a global sales and service network was set up, and an executive interior was designed as an alternative to the utilitarian commuter airline interior.

Since then, more than 1,800 PC-12s have been delivered around the world – far exceeding the original business model forecast for the big single turboprop. The PC-12's appeal to a wide range of operators from owner-flown to corporate, air ambulance, special missions, fractional and charter programs is the reason for its perennial high sales volume and value retention.

While there were many initial skeptics of the single-engine turboprop concept, the unmatched reliability of the Pratt & Whitney PT6 engine and an outstanding safety record proven over more than 8 million flight hours have combined to make the argument for a twin essentially moot. Consequently, new competitors are abandoning older twin turboprop designs and following Pilatus' lead into the single-engine turboprop segment. The fuel efficiency, operating and acquisition costs, and high payload-to-weight ratio advantages of the single simply outweigh all of the perceived benefits of twins.

The new PC-12 NGX, announced at the 2019 NBAA convention and starting customer deliveries in April 2020, is a considerably different aircraft than the 1994 original. Pilatus' dedication to continuous improvement and responsiveness to market demands has resulted in a highly refined aircraft with greater performance, more sophisticated and automated avionics and systems, higher payload capacity, reduced operating costs, and bespoke executive interiors when compared to its predecessors.

In the early years of PC-12 production, modifications and system enhancements were rolled into production as "Series" changes as they were developed. More recently, though, numerous changes are bundled together into more significant overall changes to the aircraft at a specific model year and/or serial number. In the interest of ensuring long-term customer satisfaction and aircraft value retention, Pilatus often makes improvements available to earlier aircraft through Service Bulletin retrofit options.

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When considering the purchase of a PC-12, especially one built prior to the introduction of the PC-12 NG in 2008, it helps to know the serial number, the model year, and the Series number. The following table provides a breakdown of serial numbers and their respective model years. For aircraft valuation consistency, Pilatus provides this information annually to the Bluebook, VRef, and JetNet services.

Model Year	PC-12 Serial Numbers (MSN)
1995	101 through 120
1996	121 through 156
1997	157 through 180
1998	181 through 227
1999	228 through 283
2000	284 through 320, 322 through 353
2001	321, 354 through 404, 406 through 418
2002	405, 419 through 474
2003	475 through 527
2004	528 through 597
2005	598 through 680
2006	681 through 773
2007	774 through 863
2008	864 through 888 (Legacy)
2008	1001 through 1069 (NG)
2009	1070 through 1175
2010	1176 through 1250
2011	1251 through 1324
2012	1325 through 1374
2013	1375 through 1450
2014	1451 through 1507
2015	1508 through 1575
2016	1576 through 1669
2017	1670 through 1749
2018	1750 through 1833
2019	1834 through 1908
2020	1909 through 1942 (NG)
2020	2001 through 2049 (NGX)
2021	2050 through TBD



Prior to the introduction of the PC-12 NG in 2008, PC-12s were also associated with a specific Series number between 0 and 10.

Series	MSN Block	Naming Convention
0	101 – 105	PC-12/41
1	106 – 120	
2	121 – 140	
3	141 – 160	PC-12/45
4	161 – 180	
5	181 – 200	
6	201 – 230	
7	231 – 260	
8	261 – 320	
9	322 – 400	
10	321, 401 – 683	
10A	684 – 888	PC-12/47
PC-12 NG	545, 1001 – 1942	PC-12/47E
PC-12 NGX	2001 & up	PC-12/47E

Dozens of small and large system improvements were made to the PC-12 between 1995 and 2001 when the Series 10 model was introduced. As many of these changes were available for retrofit through Service Bulletins, it is important that a buyer consult with an Authorized Pilatus Sales Center before purchasing a pre-owned PC-12. An Authorized Pilatus Sales Center is a buyer's most knowledgeable resource when it comes to the configuration, ownership, and maintenance history of a specific aircraft.

Some of the high-level changes associated with each Series block of aircraft include:

Series 0 - 2

Production serialization changes to improve systems function and reliability.

Series 3

Gross takeoff weight increased from 9,040 lb (4,100 kg) to 9,920 lb (4,500 kg).

Series 4

• New pilot and passenger seats certified for increased gross weight.

Series 5

- 4,500 kg gross takeoff weight option becomes standard.
- ECS and insulation changes to improve cabin heating.

Series 6

- Smaller winglets introduced.
- · Windshield heat covers full wind screen.



Series 7

- New CAWS to allow engine chip detector to be shown in flight.
- Revised external power and auto-start system logic.
- New fuel vent system in wings uses hinged float instead of check valve.

Series 8

- Three-place aft bench option for executive interior.
- Bag-type cockpit and cabin insulation.
- Improved engine air intake three-piece anti-ice lip.

Series 9

- New exterior lighting.
- Improved cabin heating system.
- Second Pitot/Static System available as an option.

Series 10

- Second Pitot/Static System with heated pitot mast and static ports made standard.
- New Engine Instrument System (EIS) with Engine Condition Monitoring System (ECMS)
- New Central Advisory and Warning System (CAWS) with audio voice callout.
- New overhead panel and Standby Power System utilizing a separate Standby Bus directly off the main battery.

Series 10A

- Gross weight increase to 10,450 lb (4,740 kg) incorporated at MSN 684.
- New IPECO crew seats.
- New ailerons with servo tabs to reduce roll forces.
- New PC-21 style winglets.
- Aileron-rudder interconnect full-time instead of incremental with flap settings.

PC-12 NG

- Honeywell Primus Apex integrated avionics system with four flat panel displays, Flight Management System (FMS), synthetic vision, and cursor control device.
- Pratt & Whitney PT6A-67P engine with 15% more horsepower yielding faster climb rate and maximum cruise speed increased to 285 kts.
- Dual batteries and dual 300-amp generators.
- Digital cabin pressurization system with dual-zone temperature control.
- Electrically actuated landing gear incorporated at MSN 1451.
- Aerodynamic improvements, LED lighting, composite 5-blade propeller incorporated at MSN 1576.



PC-12 NGX

- Introduced to the public at the October 2019 NBAA convention with EASA and FAA certification already achieved.
- Pratt & Whitney PT6E-67XP engine with Electronic Propeller and Engine Control System (EPECS), digital auto-throttle, 10% more horsepower in cruise for 290 kts maximum cruise speed.
- 10% larger passenger cabin windows.
- New executive seats with full recline.
- New cabin air distribution system.
- 600-hour maintenance inspection intervals and 5,000 hours TBO on engine.

PC-12 Spectre

Paramilitary, special missions, ISR platform operated by Federal, State, and local governments. Incorporates a retractable EO/IR sensor in the tailcone, with observer and operator stations in the main cabin. Optional cargo-drop/jump door integrated into the main cargo door.

U-28A "Draco"

United States Air Force designation for the PC-12, modified for airborne intelligence, surveillance, and reconnaissance support to humanitarian operations, search and rescue and conventional and special operation missions.