



# PRATT & WHITNEY CANADA PT6A-67P ENGINE UPGRADE

FOR THE LEGACY PILATUS PC-12

STC# SA02266LA, issued 2012

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# THE POWER OF METALLURGICAL SCIENCE

The advanced engine technology of the Pilatus NG series is now available to operators of pre-NG Pilatus PC-12 aircraft. Finnoff Aviation Products holds the FAA-certified STC for the Pratt & Whitney (P&W) engine upgrade.

#### **KEY BENEFITS:**

- Increased Horsepower
- Increased Speed
- Faster Climb
- Increased Electrical Power
- New Pratt &Whitney Warranty 5 years or 2,500 hour, whichever comes first, when purchased from Finnoff Aviation Products

TAKEOFF	1,200 Shaft Horsepower	
CLIMB	<ol> <li>The PT6A-67P is flat rated to 1200 SHP limit in climb as compared to the PT6A-67B which is flat rated to 1000 SHP limit.</li> <li>Enjoy FASTER DIRECT CLIMB to 30,000' at any weight and temperature combination.</li> </ol>	
CRUISE	Cruise speed increase based on altitude and OAT	
WARRANTY	5 Years or 2,500 Hours Whichever Comes First if Purchased From Finnoff Aviation Products	

## DESIGN

The new P engine Incorporates the use of the latest metallurgical science, producing a new generation of engine with greater thermodynamic efficiency.

## Improved Metallurgy Allows For Highier Maximum Temperatures

The nickel superalloy single-crystal turbine blades incorporate metals witti very beneficial properties for the engine. One property of the new alloy Is the Increased creep resistance, meaning the engine is more resistant power loss overtime.

The PT6A-67P engine can maintain mechanical power to higher altitudes due to higher thermodynamic power and higher pressure ratio.

#### SAFETY

The increased maximum continuous shaft horsepower of the P engine of 1,200 is a 20% increase over the 1,000 continuous of the B engine. ATC willing, you'll be granted that unrestricted climb.

The higher thermodynamic efficiency increases the maximum ITT to 850°C takeoff power and 820°C maximum continuous. This materially enhances the aircraft's climb rate and cruise performance, creating more peace of mind from the left seat when climbing out of unsavory weather with the separator open.

#### A More Efficient Compressor Section

Pratt & Whitney's PT6A-67A high altitude program successfully certified a turboprop engine to operate at a service ceiling of 41,000 feet! This program generated improvements to the compressor section of the engine which increases efficiency of the gas generator and improves the engine's performance at altitude.

These improvements have been incorporated into the P engine in the form of a new compressor section – an improvement over the B engine.

## **New Inlet Casing Reduces Corrosion**

Aluminum is more corrosion-resistant than the original magnesium inlet.

## **ELECTRICAL**

Boasts a re-designed accessory gearcase, with a second, gear-driven 300-amp generator.

A total generating capacity of 600 amps, providing substantial capacity for

- Electrical Upgrade System Option providing much more electrical power In the event of a Gen 1 failure.
- Reserve Electrical Power to meet Part 135 rule: 14CFR 135.163 Part F
- Special payloads such as
  - air ambulance
  - mapping
  - surveillance



	OVERHAUL	NEW 67P ENGINE
Continuous Power	1,000 shp	1,200 shp
Electrical Power	420 amps	Up to 700 amps
Time To Climb	Baseline	10 Minute Reduction
ITT Max Cruise	720°C	820°C
Install Time	2-3 Months	2-3 Weeks
Resale	Market	Market + 500k-1M
Cost	550k-1.1M	948K With P&W Rebate
Warranty	Negotiated	5 Years or 2,500 Hours Whichever Comes First if Purchased From Finnoff Aviation Products

#### Pratt & Whitney Canada ESP Plan

If you still have time left on your B engine Pratt & Whitney Canada will pay you for time remaining on your existing engine to offset the purchase price of the new 67P engine. Subject to certain terms and conditions.

#### **DESCRIPTIONS AND DIMENSIONS**

Type - A free turbine turboprop propulsion engine incorporating a multi-stage compressor driven by a single stage turbine and a two-stage free turbine driving the propeller shaft through planetary reduction gearing.

Propeller Shaft Design Speed	1700 RPM
Propeller Shaft Rotation - Viewed from rear of engine	Clockwise
Engine Diameter	19 in. approx.
Engine Length	76.0 in. approx.
Fuel - Conforming to:	CPW204OF SB 14004
Oil - P&WC Approved Oils Conforming to:	SB 14001
Warranty	5 Years or 2,500 Hours Whichever Comes First if Purchased From Finnoff Aviation Products

\* Pilatus serial number 888 and below. This upgrade is certified by the FAA under STC #SA02266LA.

# ENGINEERING EXCELLENCE

For over 20 years, Finnoff Aviation Products has led the industry with products designed to enhance the performance, safety, comfort, and reliability of the Pilatus PC-12. From engine upgrades and props to avionics, and batteries, discover why operators trust Finnoff Aviation Products for all things PC-12.



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