

PC-6 TURBO PORTER

ANYWHERE, ANYTIME  
IN ANY ENVIRONMENT



 **PILATUS** 



CAPABILITY + RELIABILITY + VERSATILITY

= PORTER-ABILITY

THE PILATUS PC-6 PORTER HAS BECOME A LEGENDARY AIRCRAFT, KNOWN AROUND THE WORLD SIMPLY AS “THE PORTER”. ITS UNIQUE SHORT TAKE-OFF AND LANDING (STOL) CAPABILITIES, RELIABILITY AND VERSATILITY IN ALL WEATHER AND TERRAIN CONDITIONS HAVE ESTABLISHED THE PC-6’S REPUTATION AS A RUGGED UTILITY AIRCRAFT.

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All information subject to change without prior notice

# CAPABILITY

THE PORTER'S UNMATCHED STOL PERFORMANCE IS ONE OF ITS KEY CAPABILITIES, PROVIDING A GREAT DEAL OF FLEXIBILITY AND ALLOWING OPERATION OF THE PC-6 WHERE ACCESS FOR OTHER AIRCRAFT IS IMPOSSIBLE. OUTSTANDING CAPABILITY IN ROUGH CONDITIONS IS ACHIEVED THROUGH LOW-PRESSURE TIRES, TWIN-CALLIPER DISC BRAKES AND AN UNDERCARRIAGE WITH HIGH BUMP ABSORPTION. WITH ITS HIGH WING AND PROPELLER GROUND CLEARANCE, THE PC-6 IS MUCH LESS EXPOSED TO DAMAGE FROM ROUGH AIRSTRIPS THAN AIRCRAFT WITH A CONVENTIONAL NOSEWHEEL-TYPE UNDERCARRIAGE.

THE PORTER IS FULLY CAPABLE OF OPERATING FROM DIFFERENT TYPES OF UNPREPARED, ROUGH AND SHORT AIRSTRIPS, IN REMOTE AREAS, AT HIGH ALTITUDES AND IN ALL CLIMATES.





## RELIABILITY

YEARS OF OPERATING EXPERIENCE, COMBINED WITH SELECTED COMPONENTS WITH A PROVEN RECORD CONTINUE TO GIVE THE TURBO PORTER AN EXCELLENT REPUTATION FOR RELIABILITY. THE EASE AND SIMPLICITY WITH WHICH THE PC-6 CAN BE MAINTAINED IS A FUNDAMENTAL FEATURE, AS IT OFFERS EXCELLENT ACCESSIBILITY, RUGGED COMPONENTS, INTERCHANGEABILITY, BASIC SKILL AND MAINTENANCE MANNING LEVELS AND MINIMUM DOWNTIME.

A SIMPLE BUT SOLID CONSTRUCTION, PROVEN SYSTEMS AND FEATURES, COMBINED WITH PRECISION WORKMANSHIP RESULT IN THE HIGHEST RELIABILITY AND LOWEST MAINTENANCE POSSIBLE. NO MATTER WHETHER HIGH AND HOT, OR LOW AND SNOW – ANYWHERE, ANYTIME YOU CAN RELY ON THE PC-6 PORTER AS A HIGH QUALITY, LIFE-LONG INVESTMENT!

ONE OF THE REASONS FOR THE GREAT POPULARITY OF THE PC-6 IS ITS VERSATILITY. WITH MINIMUM EFFORT, THE PORTER CAN BE CONVERTED FOR VARIOUS MISSIONS: HAVING JUST OPERATED AS A PARA PORTER DROPPING PARACHUTISTS, THE AIRCRAFT CAN BE AIRBORNE AGAIN IN A MATTER OF MINUTES, BEING USED AS A PLATFORM FOR HIGH QUALITY AERIAL PHOTOGRAPHY OR AS A BREATHTAKING SIGHTSEEING FLIGHT WITH A GLACIER LANDING ...

WHETHER AS A WORKHORSE, A PLATFORM FOR AERIAL SURVEILLANCE, AIR AMBULANCE OR AS A PARACHUTING OR PASSENGER AIRCRAFT, THE PORTER DELIVERS THE VERSATILITY TO PERFORM ANY ROLE THAT COMES ITS WAY.

## VERSATILITY



## AMBULANCE

The Porter combines:

- range and economy of a fixed-wing aircraft
- capability to penetrate remote areas otherwise only accessible by helicopter
- quiet qualities ideally suited to operation from hospital airstrips
- large sliding doors which allow easy loading and unloading of stretchers



## SKIS

The Porter can be equipped with skis allowing operation on snowfields/glaciers. The skis can be lowered and raised in flight enabling the aircraft to land on both snow and runways.



## DESERT AND BUSH OPERATION

The Turbo Porter is designed to operate under the most unfavorable conditions. Specially-designed options easily turn the PC-6 into a desert horse for operation on sandy, stony, soft or muddy ground. The ability to operate from different types of unprepared airstrips and in the harshest environments has proven the PC-6 to be the real "workhorse" of the air.



## TRANSPORT CARGO

With a useable volume of more than three cubic meters and a payload of more than 1,000 kg, the name "Porter" means what it says as the PC-6 is made for the job. Specially-made fixtures allow cargo to be fixed very easily and safely. Thanks to its outstanding STOL capabilities, the PC-6 can operate in areas normally only reachable by helicopters.

**SEARCH AND  
RESCUE  
SURVEILLANCE  
PATROL  
BORDER CONTROL**

Various issues such as Search And Rescue (SAR), border patrol, smuggling, the trade of goods, geographic analysis and intelligence call for aerial surveillance. With its outstanding flight characteristics and the standard floor hatch, the PC-6 Porter is an extremely efficient and cost-effective platform to carry out a wide range of surveillance missions. Various systems such as FLIR, LIDAR, digital cameras and other optical platforms can be integrated into the aircraft without design changes at the customer's wish.



**PHOTO  
LASER**

The Porter is an extremely stable platform, making it ideal for SAR, aerial photography, survey and laser photogrammetric and scanning operations. The Porter's versatility extends from low-level flight in narrow valleys to a service ceiling of 25,000 ft. With the new 250 Amp power distribution system and the two separately controlled mission busses, a camera and/or a search or scanning sensor head can be operated without any in-flight effects on the avionics and instrument systems. An oil collector system and exhaust deflector can be installed for special mission operations to protect the camera lens and all sensors heads.

**PARACHUTING**

The PC-6 is one of the world's favorite aircraft for para dropping. From an economical, organizational and safety point of view, the operation of the Porter with 10 parachutists has proven to be an ideal solution. The number of companies and drop zones operating the PC-6 is still growing.



**FLOATS**

Operated on both seaplane and amphibian floats in several countries, the Turbo Porter has proved to be a successful seaplane. The floats modification is covered by a Supplemental Type Certificate (STC), held by Wipaire, Inc. Floats Type: Wipline 6100.

# OPTIONS



UNDERWING TANK



WEATHER RADAR



TRAPDOOR



CAMERA INSTALLATION



SKI



SAND FILTER



TRIPLE BENCH CONFIGURATION



STRETCHER



MUDGUARD



ENGINE OIL DRAINING SYSTEM



**CABIN**

CABIN VENTILATION, WITH SIX OUTLETS

CAMERA INSTALLATION

PARA KIT

PASSENGER SEAT

PAX, CARGO KIT

RIGID TOW BAR

STOWAGE IN REAR FUSELAGE FOR 6 PAX SEATS

STRETCHER L/H (X 2)

TIE-DOWN POINTS (X 9)

BELTS FOR 9 SKYDIVERS

TRAPDOORS FOR CAMERA WORK + CARGO DROPS

TRIPLE BENCH SEAT

**COCKPIT**

CO-PILOT CONTROL STICK AND RUDDER PEDALS

CO-PILOT SEAT, FOUR-WAY-ADJUSTABLE

DUAL CONTROL BRAKES

HF

WEATHER RADAR

OXYGEN SYSTEM, CREW AND PASSENGERS,

8 OUTLET ADAPTERS

PROP DE-ICE

**EXTERIOR**

WINDSHIELD CURTAINS, PILOT AND CO-PILOT

BEACON, ROTATING, TOP/BOTTOM

ENGINE OIL DRAINING SYSTEM

(FOR CAMERA INSTALLATION)

NEW POWER DISTRIBUTION WITH SPECIAL-

MISSION BUS (2 X 40 AMPS)

FERRY TANK SYSTEM

HORIZONTAL STABILIZER STONE PROTECTION

MUDGUARD

SAND FILTER (ENGINE AIR INLET)

TAILWHEEL DEBRIS GUARD

UNDERWING, PROVISIONING FOR TWO TANKS

UNDERWING TANKS, 2 X 64 GAL.,

INCL. INSTALLATION KIT

SKI EQUIPMENT, WITH STRUT HOUSING

FIRE FIGHTING INSTALLATION

**STC**

AUTOPILOT

FOUR-BLADED PROPELLER

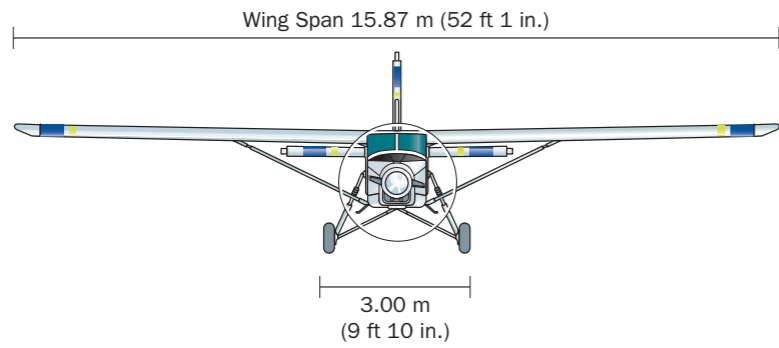
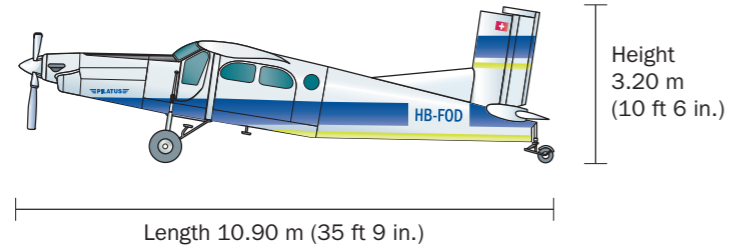
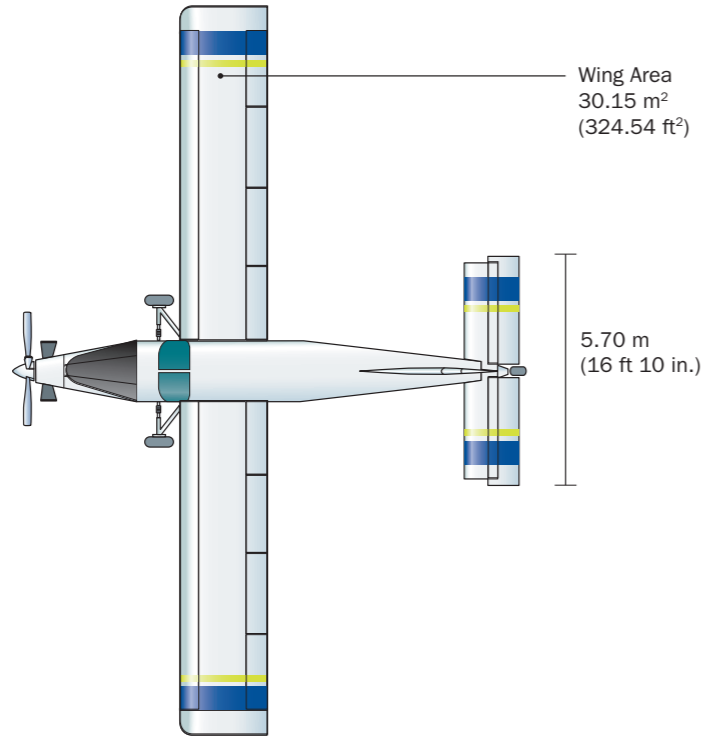
FLOATS, AMPHIBIOUS

FLOATS, STRAIGHT



# DIMENSIONS AND GEOMETRY

WING SPAN	15.87 M	52.07 FT
WING AREA	30.15 M <sup>2</sup>	324.54 FT <sup>2</sup>
OVERALL LENGTH	10.90 M	35.76 FT
HEIGHT	3.20 M	10.50 FT
TRACK	3.00 M	9.84 FT





AUTOPILOT  
AUTO  
AUTO TRIM YAW TRIM YAW TRIM



COM  
CRS BARO  
RANGE  
PAN  
MENU  
FPL  
PROC  
CLR  
ENT  
FMS

BUS TIE BREAKER  
AP/AVIC  
BUS 1  
BUS 2  
COCKPIT FAN  
CABIN FAN  
ANTI ICE  
PROP DEICE  
LH PUMP  
EXTERNAL FUEL CONTROL  
START  
RH PUMP  
ON  
OFF  
EMER  
NORMAL

ALTERNATE  
INTERRUPT  
EMERG FUEL CON  
INCREASE  
DECREASE

UNDERWING FUEL TANKS  
USABLE CAPACITY  
487 LTRS  
128 US-GAL  
107 IMP-GAL

FOR FLIGHT WITH CABIN DOORS  
AND/OR FLOOR HATCH OPEN SEE  
AFM SUPPLEMENT REPORT NO. 102N

DO NOT PRESS IN FLIGHT

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# WEIGHT AND BALANCE

BASIC EMPTY WEIGHT (STANDARD IFR)	1,395 KG	3,075 LB
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The basic empty weight is defined as the complete aircraft, empty of usable fuel and without optional equipment, but including engine oil, unusable fuel and items of equipment that are an integral part of the basic aircraft.

## MAXIMUM OPERATING WEIGHTS

MAX. RAMP WEIGHT	2,810 KG	6,195 LB
MAX. TAKE-OFF WEIGHT	2,800 KG	6,173 LB
MAX. LANDING WEIGHT	2,660 KG	5,863 LB
MAX. ZERO FUEL WEIGHT	2,400 KG	5,291 LB

The above weights comply with CAR 3.

## CENTRE OF GRAVITY RANGE

UP TO 1,450 KG (3,197 LB)	11% TO 38% MAC
AT 2,800 KG (6,173 LB)	32% TO 38% MAC

With linear variation between given points.

# SPEEDS

Equivalent Air Speeds (EAS) at Max. Operating Weight

DESIGN DIVING SPEED ( $V_D$ )	167 KNOTS
NEVER EXCEED SPEED ( $V_{NE}$ )	151 KNOTS
DESIGN CRUISING SPEED ( $V_C$ )	119 KNOTS
MAX. FLAP EXTENDED SPEED ( $V_{FE}$ )	95 KNOTS
STALL SPEED (IDLE POWER) WITH FLAPS UP ( $V_S$ )	58 KNOTS
STALL SPEED (IDLE POWER) WITH FLAPS DOWN ( $V_{SO}$ )	52 KNOTS
MAX. SPEED IN LEVEL FLIGHT WITH MAX. CONTINUOUS POWER ( $V_H$ )	125 KNOTS

# RANGE

	CAPACITY US GAL	CAPACITY LITRE	CAPACITY KG	RANGE KM	RANGE NM
WING FUEL TANK	170	644	515	926	500
UNDERWING TANKS	128	487	390	685	370
TOTAL FUEL CAPACITY	298	1,131	905	1,611	870
FUEL CONSUMPTION/H	39	148	118.8		

# PERFORMANCE

## ALTITUDE LIMITS

MAX. OPERATING ALTITUDE	25,000 FT
SERVICE CEILING (AT MAX. WEIGHT)	20,500 FT

## TEMPERATURE LIMITS

MINIMUM	- 55° C
MAXIMUM	+ 55° C

## NORMAL LOAD FACTORS

MAX. POSITIVE G	+ 3.58 G
MAX. NEGATIVE G	- 1.43 G
MAX. POSITIVE G WITH FLAPS DOWN	+ 2.00 G
WING LOADING	92.87 KG/M <sup>2</sup> 19.02 LB/FT <sup>2</sup>

## CLIMB

MAX. RATE OF CLIMB AT SEA LEVEL	1,010 FT/MIN
MAX. RATE OF CLIMB AT 5,000 FT	935 FT/MIN

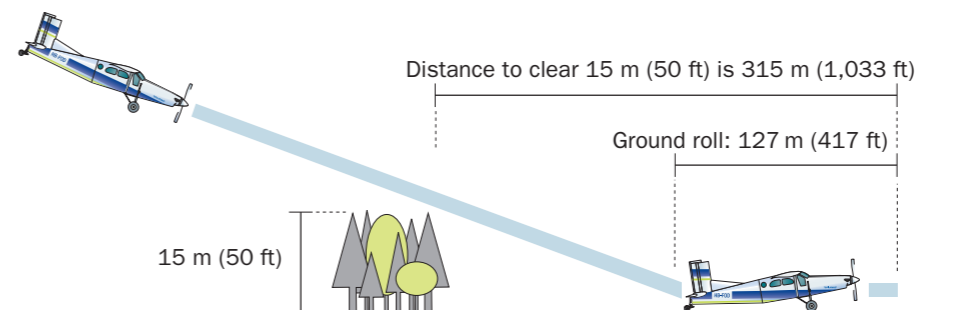
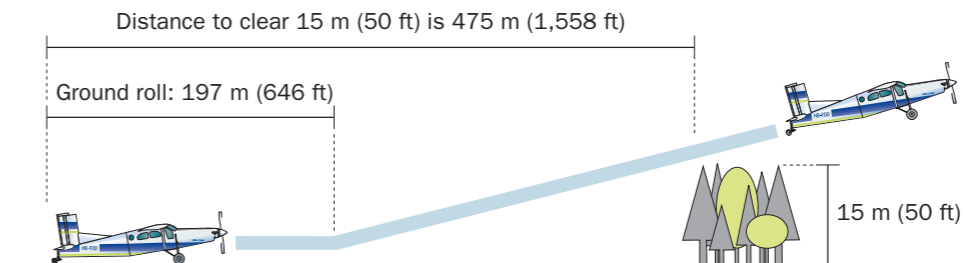
## TAKE-OFF AND LANDING PERFORMANCE

NORMAL CONDITIONS		
TAKE-OFF GROUND ROLL AT SEA LEVEL	197 M	646 FT
TAKE-OFF DISTANCE TO 15 M (50 FT)	475 M	1,558 FT
LANDING GROUND ROLL AT SEA LEVEL*	127 M	417 FT
LANDING DISTANCE FROM 15 M (50 FT)*	315 M	1,033 FT

\* Reverse thrust selected on touchdown.

## STOL CONDITIONS

TAKE-OFF GROUND ROLL AT SEA LEVEL	197 M	646 FT
TAKE-OFF DISTANCE TO 15 M (50 FT)	440 M	1,443 FT



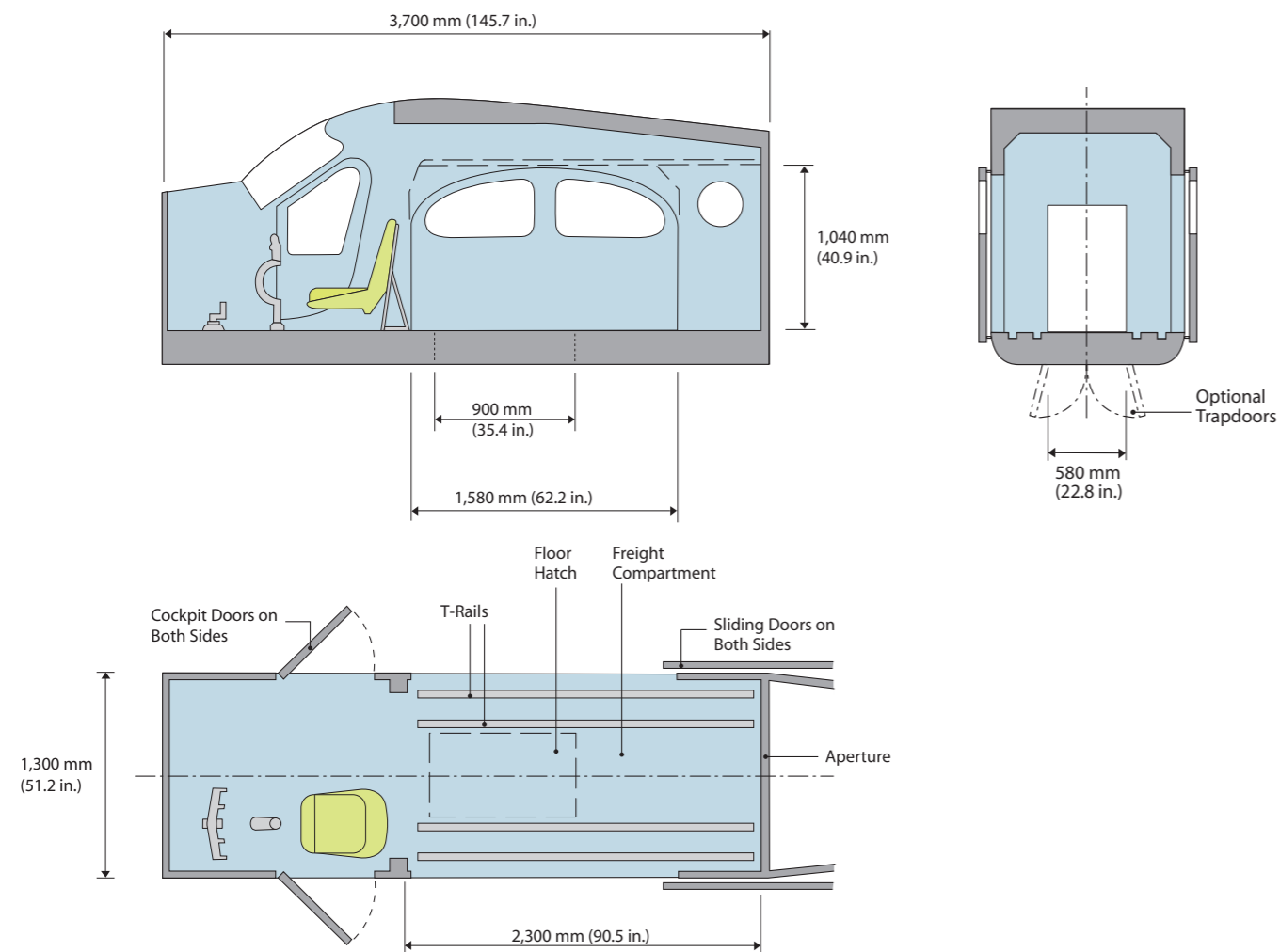
# CONSTRUCTION & FUSELAGE

Although rugged and utilitarian, the PC-6 Turbo Porter is a high quality, life-long investment. With its high wing and propeller ground clearance, and its undercarriage with high bump absorption, the Turbo Porter is much less susceptible to damage from rough airstrips than aircraft with a conventional nosewheel-type undercarriage.

The design uses conventional semi-monocoque construction techniques (frames, ribs, stringers, reinforcements and skin panels) for the wing, fuselage and empennage. The primary structure is built of 2024 aluminium alloy sheet and extrusion.

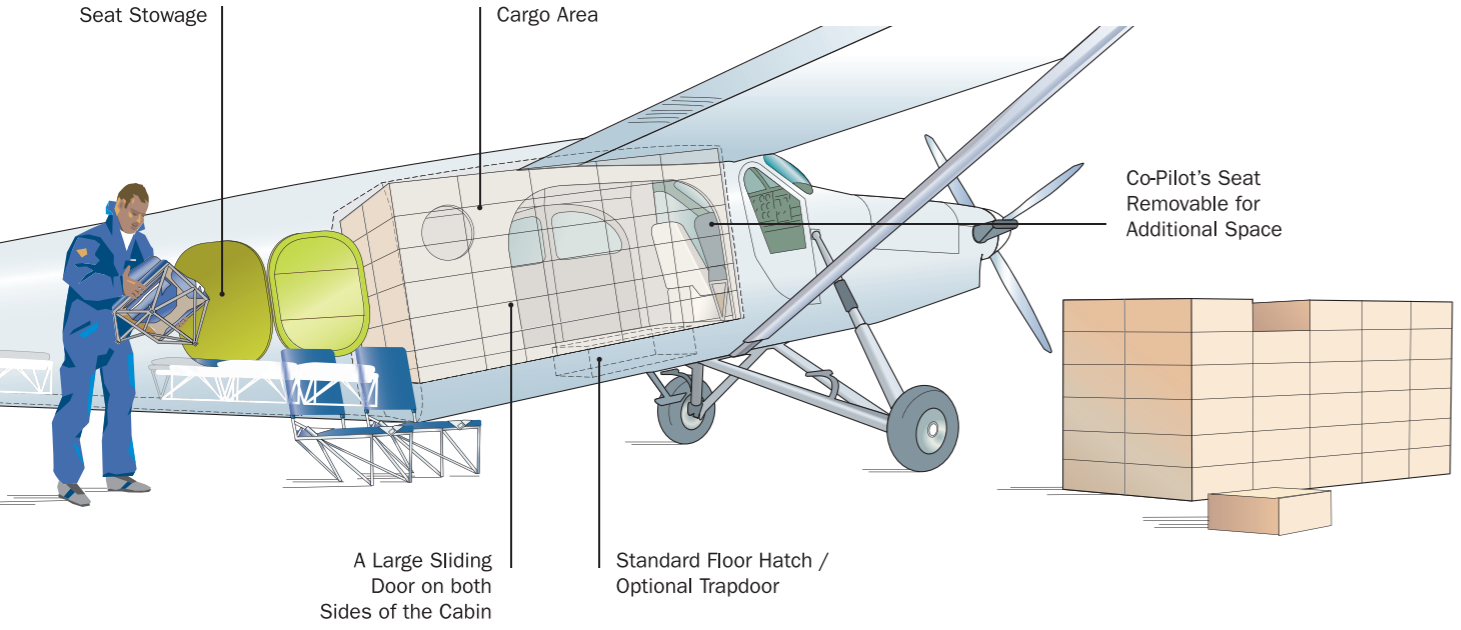
These features combined with precision workmanship provide a high degree of interchangeability as well as the easy replacement of parts. All metal components are protected against corrosion by priming, painting, and plating/enameling before a tough polyurethane-based external paint is applied, protecting the Turbo Porter in all types of climate and conditions.

The fuselage is equipped with a hinged door on both sides of the cockpit and a large sliding door on both sides of the cabin. Optional trapdoors can be fitted in the centre of the cabin floor. Each trapdoor can take a load of 150 kg (330 lb). The trapdoors can be opened and closed in flight by the pilot.



# CABIN VOLUME AND PAYLOAD

The Pilatus PC-6 has earned its reputation as a workhorse with a cabin volume of more than three cubic meters and a total payload of over 1,000 kg. A large sliding door on both sides of the aircraft allows easy access to the cabin for loading and removal of freight. When extra space is needed, the passenger seats can be quickly removed and stowed in the additional seat stowage area behind the cabin. The standard floor hatch enables a platform for a wide range of surveillance functions without the necessity of any design changes.



# TECHNICAL OVERVIEW



- ELECTRICAL FLAPS
- ELECTRICAL TRIM (ALL AXES)
- STABILIZER, RUDDER AND AILERON
- ADJUSTABLE PILOT SEAT
- SIX PASSENGER SEATS  
(STOWABLE FOR CARGO FLIGHTS)
- A LARGE SLIDING DOOR ON BOTH SIDES  
FOR EASY ACCESS
- HATCH DOOR FOR SUPPLY DROPPING,  
CAMERA INSTALLATION, ETC. (EASY TO USE BY PILOT)



## PT6A-27

Known throughout the world, Pratt & Whitney Canada's PT6A is the most reliable and thoroughly proven power plant in its class. The PC-6's PT6A-27 is an advanced design of this engine family, with a thermodynamic power rating of 650 shaft horsepower (SHP), flat-rated to 550 SHP at take-off.



## PROPELLER

The propeller is a Hartzell HC-B3TN-3D three-bladed (and on STC basis, a Hartzell HC-D4N-3P four-bladed), fully reversing and feathering constant-speed type, driven by the free turbine through a reduction gearbox. The propeller is equipped with an optional anti-icing facility.

## COCKPIT

The brand new PC-6 glass cockpit features state-of-the-art Garmin G950 cockpit avionics. It sets unprecedented standards in simplicity, reliability and technology for pilots in all phases of the flight. The cockpit comprises a complete and ready-to-fly system, inspired by a low workload philosophy.

Two large LCD screens provide clear visual input, allowing pilots to operate with ease and dispatch in a wealth of situations.

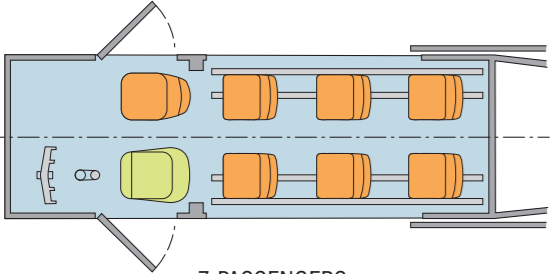
The main features of the cockpit are:

- 10.4" Primary Flight Display (PFD) that provides all the important flight information for the pilot including attitude, airspeed, altitude and vertical speed and Nav/Com tuning. It also provides an HSI which displays all navigation information.
- 10.4" Multi Function Display (MFD) that provides access to a multitude of systems and mission management pages including engine sensor data, topography, terrain, traffic, weather, airport charts and airways data.
- An autopilot can be installed in the PC-6. The autopilot provides an automatic flight capability in all the phases of flight.
- The Secondary Flight Instruments provide a fully independent back-up for attitude, altitude and airspeed in case of complete electrical failure.
- Electrical and avionic equipment can be easily adjusted to customer requirements.
- More options like TCAS, TAWS, radar, stormscope etc. are also available.

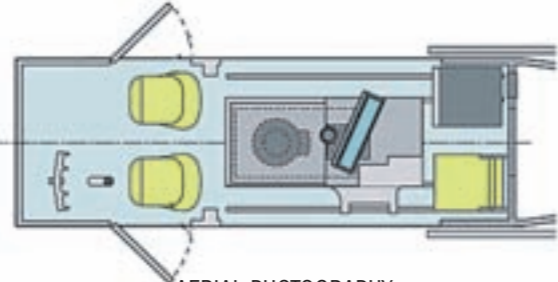


# CABIN LAYOUTS

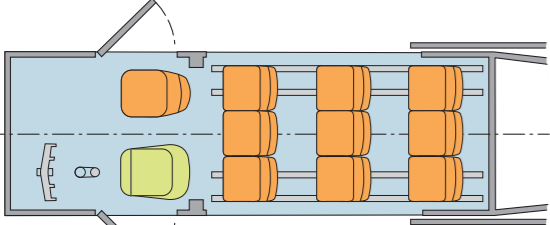
The Pilatus Turbo Porter is a flying system which is convertible to perform a wide range of missions. The design of the aircraft permits rapid conversion from one application to another. The following are the cabin configurations for various missions.



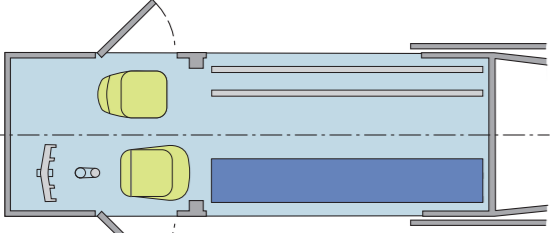
7 PASSENGERS



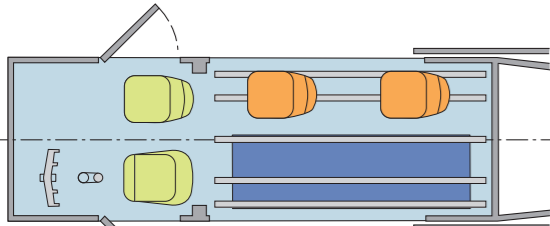
AERIAL PHOTOGRAPHY



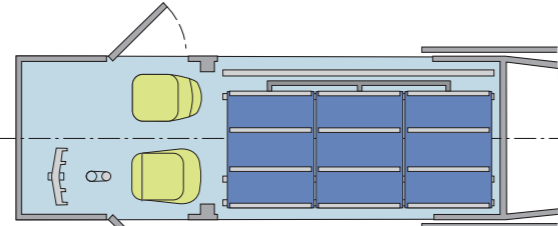
10 PASSENGERS



PARADROPPING



AMBULANCE



FERRY EQUIPMENT

3 tanks, approx. 568 litres (150 US gal).  
Ferry tank operations are in accordance with CAR 8.



THE PORTER IS READY.  
ARE YOU?





Pilatus Aircraft Ltd was founded in 1939 and is currently world market leader in the manufacture and sale of single-engine turboprop aircraft. It is the only Swiss company that develops and produces private and training aircraft. At the headquarters in Stans, Switzerland, Pilatus is licensed to maintain and perform upgrades on a variety of aircraft. This service is complemented by three independent subsidiaries in Altenrhein (Switzerland), in Broomfield (Colorado, USA) and Adelaide (Australia). With over 1,100 employees at its headquarters, Pilatus is one of the largest employers in Central Switzerland and is active in the promotion of almost 100 apprentices in seven different vocations.

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