

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.



A high-angle aerial photograph of a yellow and black PC-6 Porter aircraft in flight. The plane is positioned diagonally across the frame, flying from the upper left towards the lower right. It has a high-wing configuration and a single propeller. The background features a rugged, grey rock face with a large, red Swiss flag with a white cross. Below the rock face is a dense green forest. The lighting is bright, suggesting a sunny day.

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



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.

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.



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	STOWAGE IN REAR FUSELAGE FOR 6 PAX SEATS
CAMERA INSTALLATION	STRETCHER L/H (X 2)
PARA KIT	TIE-DOWN POINTS (X 9)
PASSENGER SEAT	BELTS FOR 9 SKYDIVERS
PAX, CARGO KIT	TRAPDOORS FOR CAMERA WORK + CARGO DROPS
RIGID TOW BAR	TRIPLE BENCH SEAT

COCKPIT

CO-PILOT CONTROL STICK AND RUDDER PEDALS	WEATHER RADAR
CO-PILOT SEAT, FOUR-WAY-ADJUSTABLE	OXYGEN SYSTEM, CREW AND PASSENGERS,
DUAL CONTROL BRAKES	8 OUTLET ADAPTERS
HF	PROP DE-ICE

EXTERIOR

WINDSHIELD CURTAINS, PILOT AND CO-PILOT	MUDGUARD
BEACON, ROTATING, TOP/BOTTOM	SAND FILTER (ENGINE AIR INLET)
ENGINE OIL DRAINING SYSTEM	TAILWHEEL DEBRIS GUARD
(FOR CAMERA INSTALLATION)	UNDERWING, PROVISIONING FOR TWO TANKS
NEW POWER DISTRIBUTION WITH SPECIAL-	UNDERWING TANKS, 2 X 64 GAL.,
MISSION BUS (2 X 40 AMPS)	INCL. INSTALLATION KIT
FERRY TANK SYSTEM	SKI EQUIPMENT, WITH STRUT HOUSING
HORIZONTAL STABILIZER STONE PROTECTION	FIRE FIGHTING INSTALLATION

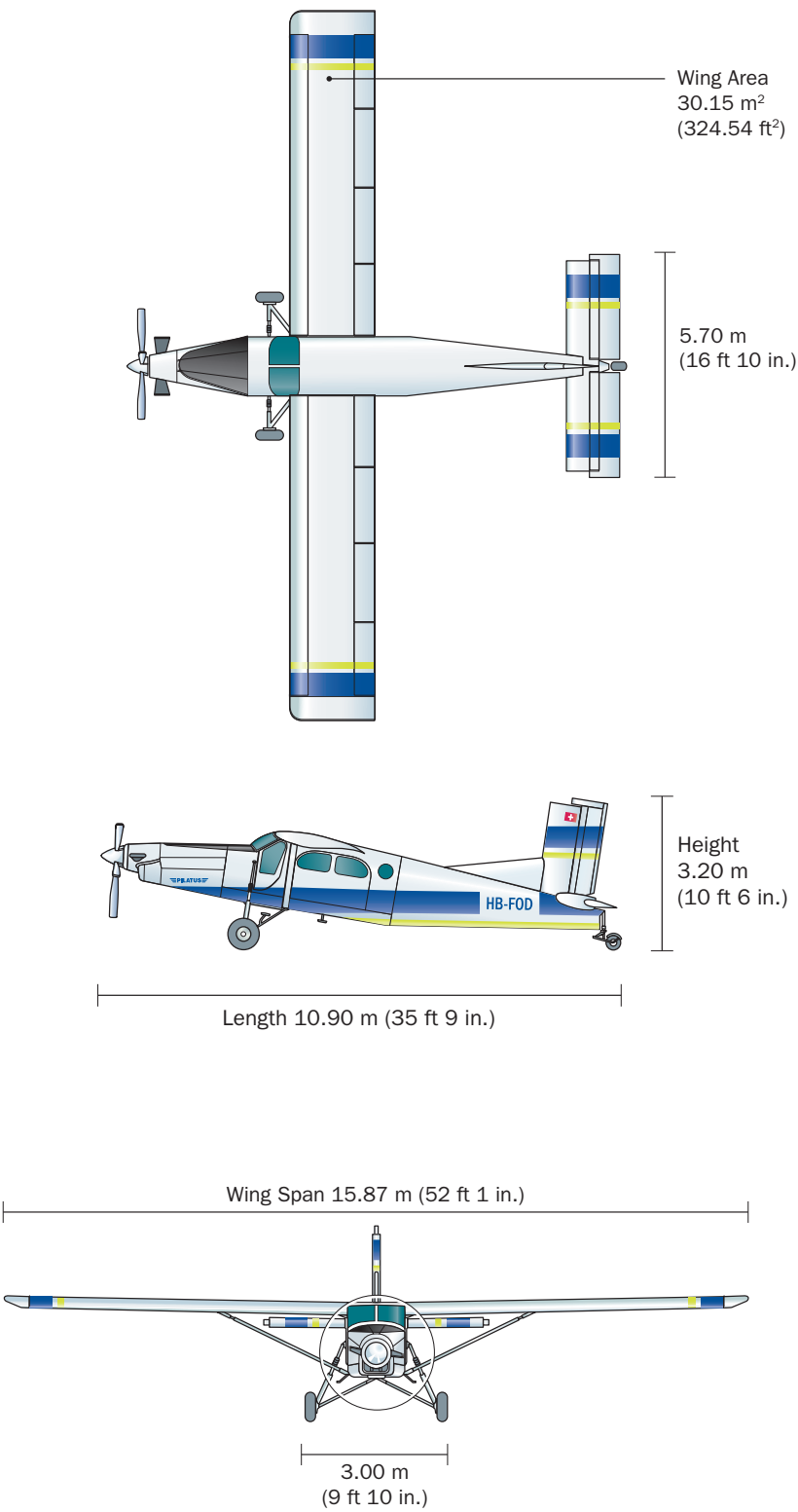
STC

AUTOPILOT
FOUR-BLADED PROPELLER
FLOATS, AMPHIBIOUS
FLOATS, STRAIGHT



DIMENSIONS AND GEOMETRY

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





AUTOPILOT
AUTO
APTS
ON
OFF
AUTO TRIM YAW TRIM YAW TRIM

NAV
HOC
ALT
BUS TIE BREAKER
BUS 1
BUS 2
COCKPIT FAN
CABIN FAN
ANTI ICE
PROP DEICE
LH PUMP
EXTERNAL FUEL CONTROL
START
ON
OFF
RH PUMP
EMER
NORMAL

COM
PUSH VOL 50
PUSH 1-2
CRS BARO
PUSH CRS CTR
RANGE
PUSH PAN
MENU
FPL
PROC
CLR
ENT
FMS
DPLT MAP

EMERG FUEL CON
INCREASE
DECREASE
UP
ALTERNATE
INTERRUPT

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. 100N

DO NOT PRESS IN FLIGHT

WEIGHT AND BALANCE

BASIC EMPTY WEIGHT (STANDARD IFR)	1,395 KG	3,075 LB
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/M²	19.02 LB/FT²

CLIMB

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

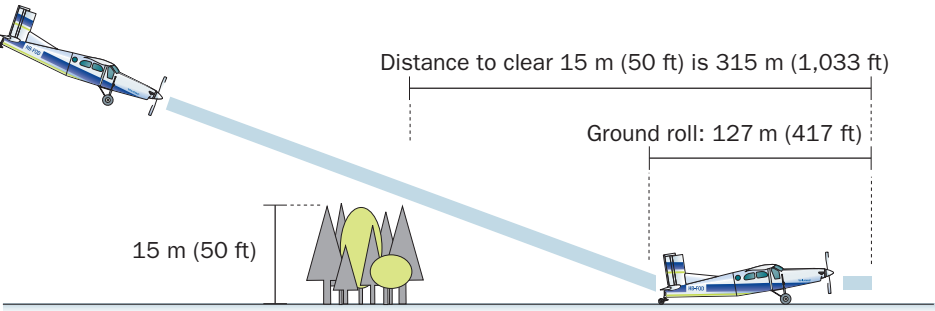
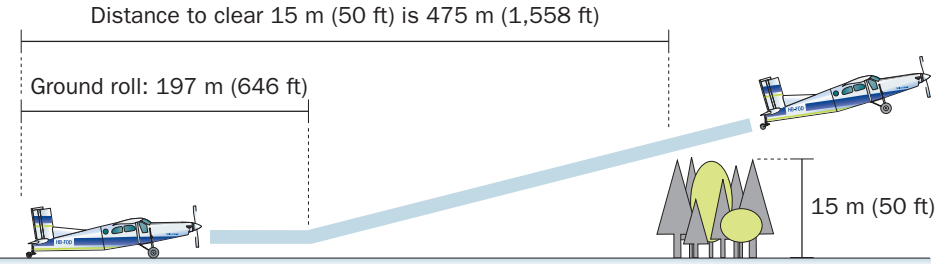
TAKE-OFF AND LANDING PERFORMANCE

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



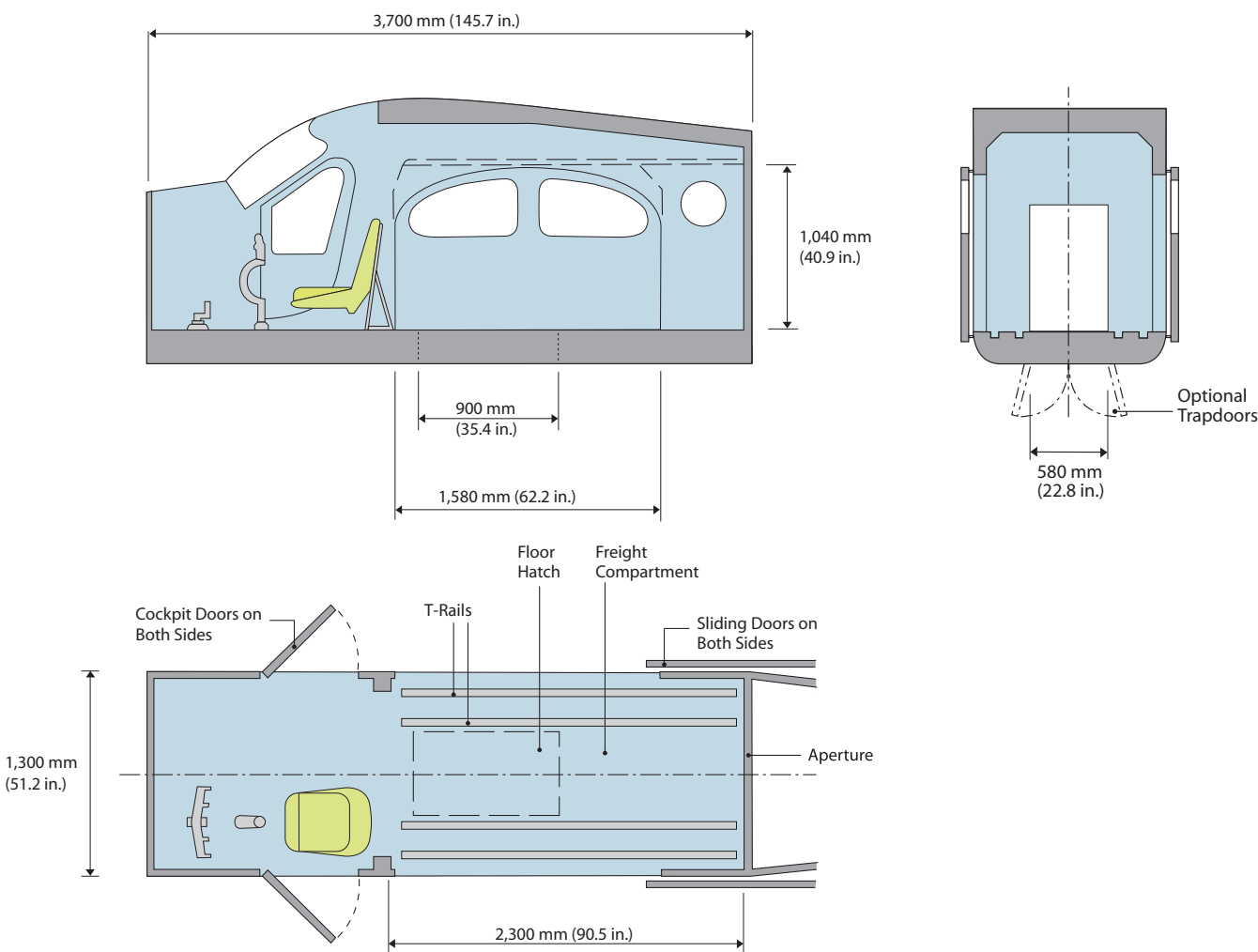
CONSTRUCTION & FUSELAGE

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.

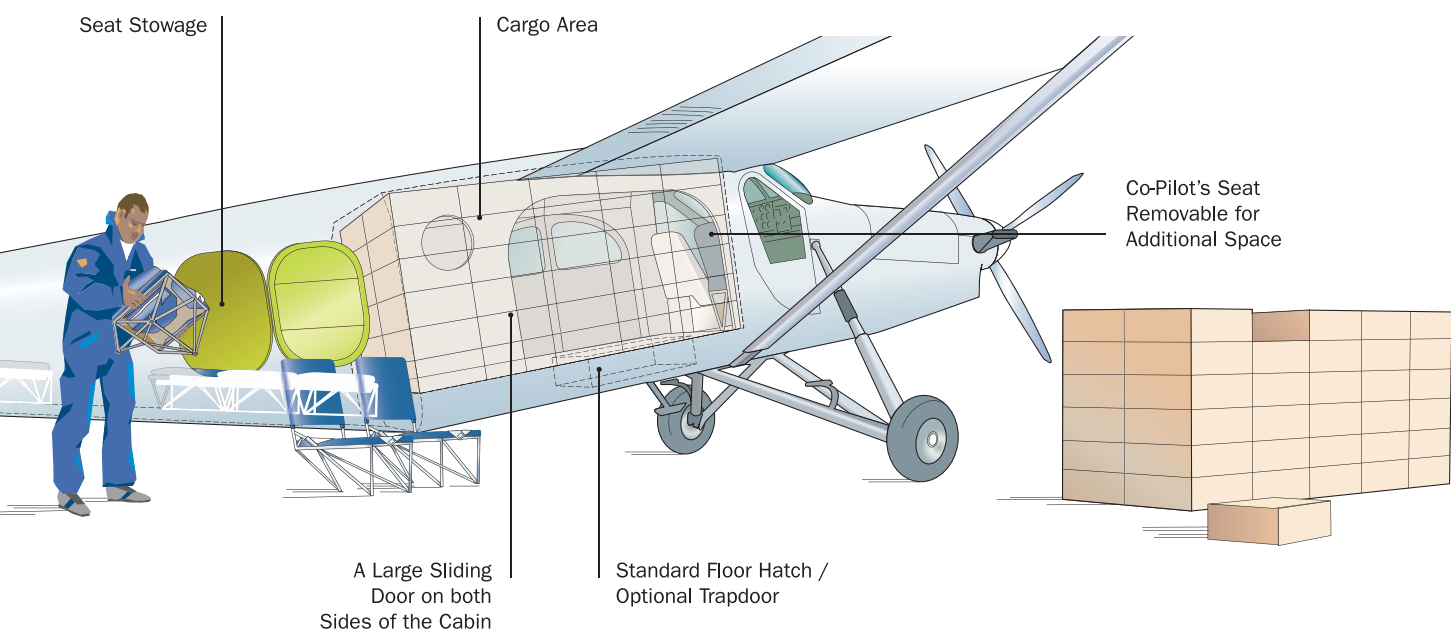
These features combined with precision workmanship provide a high degree of interchangeability as well as the easy replacement of parts. All metal components are protected against corrosion by priming, painting, and plating/enameling before a tough polyurethane-based external paint is applied, protecting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

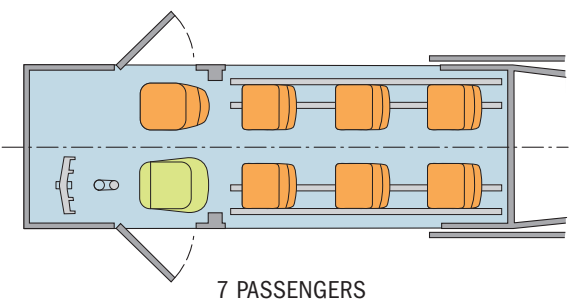
Two large LCD screens provide clear visual input, allowing pilots to operate with ease and dispatch in a wealth of situations.

The main features of the cockpit are:

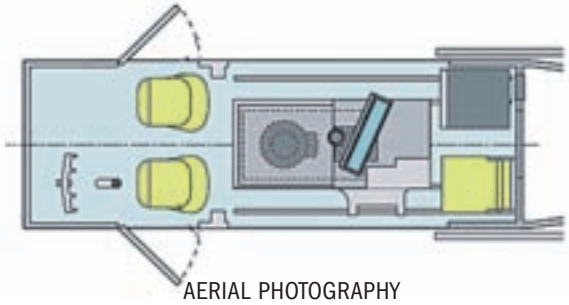
- 10.4" Primary Flight Display (PFD) that provides all the important flight information for the pilot including attitude, airspeed, altitude and vertical speed and Nav/Com tuning. It also provides an HSI which displays all navigation information.
- 10.4" Multi Function Display (MFD) that provides access 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

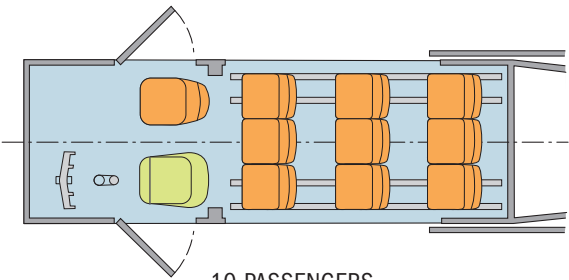
The Pilatus Turbo Porter is a flying system which is convertible to perform a wide range of missions. The design of the aircraft permits rapid conversion from one application to another. The following are the cabin configurations for various missions.



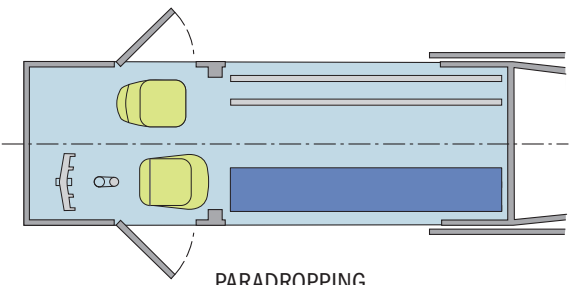
7 PASSENGERS



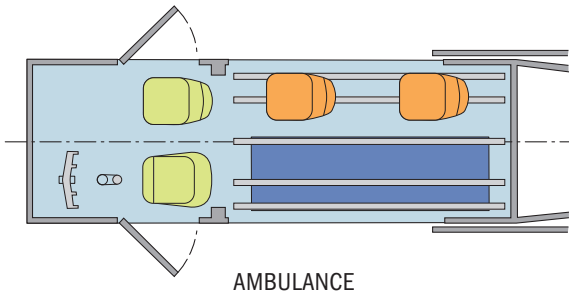
AERIAL PHOTOGRAPHY



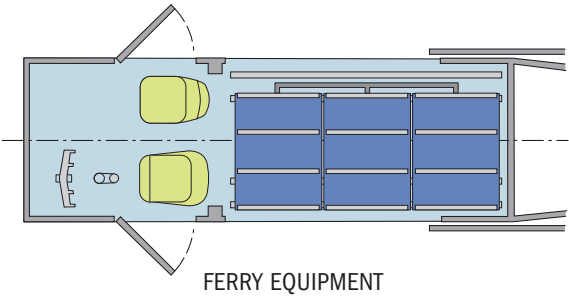
10 PASSENGERS



PARADROPPING



AMBULANCE



FERRY EQUIPMENT

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





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.

Direct Contact

Phone +41 41 619 65 80

Fax +41 41 619 65 76

salespc6@pilatus-aircraft.com

Pilatus Aircraft Ltd

P.O. Box 992, 6371 Stans, Switzerland

Phone +41 41 619 61 11, Fax +41 41 610 92 30

www.pilatus-aircraft.com

