

# XSTOL EXTREMELY SHORT TAKE-OFF & LANDING

XSTOL = The ability of an aircraft to take-off and land in less than 800 ft (244m) while carrying a load greater than its own empty weight.

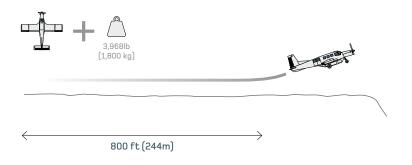




This aircraft has such unique Extremely Short Take-Off and Landing (XSTOL) capabilities that it demanded a class of its own. The result of more than fifty years of evolution, the P-750 XSTOL is the world's first XSTOL aircraft unmatched by any other production aircraft.

The XSTOL delivers unsurpassed capability to provide:

- Take-off and landing in less than 800ft (244m) at MTOW, even when it's hot and high.
- Operate off semi-prepared strips in all types of terrain.
- Carry a load of more than 4,000lb (1814kg) even in hot and high conditions.
- Rugged, dependable construction with extended airframe/engine inspection intervals of 150hrs.
- Proven, globally-supported components from leading aerospace companies, including Pratt & Whitney Canada, Garmin, Hartzell and Honeywell.



## THE ULTINATE UTILITY AIRCRAFT

"We operate into approximately 300 remote bush strips throughout Papua New Guinea ranging from 400-800m level to 380-600m with 5-18% slopes. There is no airstrip in the country (currently open and maintained) that we cannot operate the XSTOL into."

Roger S Millist Pilot / CEO Adventist Aviation Papua New Guinea



### PACIFICAEROSPACE

The P-750 XSTOL is the latest aircraft from Pacific Aerospace and has consistently proven itself while operating in some of the toughest environments an aircraft can face.

Since it started manufacturing aircraft in 1954, its manufacturing facility in Hamilton, New Zealand has produced more than 600 extraordinarily capable aircraft. Pacific Aerospace has built an excellent name for rugged aircraft that are easy to fly and maintain and are optimised for every job they undertake.

"The P-750 XSTOL performs where others can't. Our customers' success is our success."

Damian Camp Chief Executive Officer Pacific Aerospace Ltd.





## PERFORM WHERE OTHERS CAN'T

MAIMAFU EASTERN HIGHLANDS PAPUA NEW GUINEA

(06 30.10' S 145 02.02' E) Altitude: 5,200ft (1,585m) Temperature: Average 30°C+ Length: 1,450ft (442m) 15% slope overall (max >18%) 3,968lb (1,800kg) landing payload 3,968lb (1,800kg) take-off payload



### PERFORMANCE ENHANCED PROFIT

Access more strips, more often, with more payload. The XSTOL can access twice as many of the world's landing strips compared to other utility aircraft. And it does so while carrying a 3,968lb (1,800kg) load.

While some of these strips can be reached by small six-seater aircraft carrying minimal loads, the XSTOL has proven its ability, in the toughest environments, to carry up to three times the load off the same strips, achieving in two hours what previously took a whole day's flying.

Its unmatched reliability and low maintenance costs provides you with an aircraft that maximises profitability and can get the job done, allowing you to make a profit on routes that were previously marginal.

### PERFORMANCE DEMONSTRATION

Africa Aerospace & Defence Expo 2008, Air Force Base Ysterplaat,

Cape Town, South Africa, Date: 19th September 08

Elevation: 200ft (61m), Wind: 10kts, Temp: 12°C



**104ft** (32m) TAKE-OFF



164ft (50m) LANDING

At AAD2008, renowned South African pilot Chris Briers flying a standard production P-750 XSTOL weighing 4,200lb (1,909kg) and complete with cargo pod, put the aircraft through its paces. The demonstration climaxed in Chris achieving a take-off distance of less than 104ft (32m) and a landing distance of 164ft (50m). This crowd-pleasing demonstration left no uncertainty to the extreme STOL performance and manoeuvrability of the P-750 XSTOL.

To view the demonstration please visit www.xstol.com



## **PROVEN** IN THE HOTTEST, HIGHEST MOST RUGGED ENVIRONMENTS

#### High altitude, hot conditions, heavy loads.

In the world's hottest environments, the XSTOL's high lift wing comes into its own carrying full loads out of short strips. This gives the operator the ability to operate out of the same air strips, all day, every day, regardless of temperature and without compromising load.

# MAXIMUM UTILITY THROUGH QUICK TURNAROUND

## A multi-tasker that makes the most of every minute.

The P-750 XSTOL is designed to do a job and every attention has been given to ensure that it is a reliable aviation work tool – there to get a job done and generate the maximum profit for its operators.

Quick turnarounds, essential for productivity, are facilitated by double rear cabin doors and a large single compartment cargo pod with a rear ramp enabling the XSTOL to be quickly loaded and unloaded. The configuration of the aircraft can be quickly changed between passenger and cargo roles within 30 minutes. All the standard passenger seats can be removed and stowed in either the storage compartment at the rear of the cabin, or in the cargo pod for quick conversion between roles on return legs.







## **TOUGH** RELIABLE, EASY TO MAINTAIN & OPERATE



### READY TO DEPART

Aircraft only make money when they are flying: the XSTOL is ready to fly more than any other aircraft.

#### LOW MAINTENANCE

With its 150-hour airframe/engine inspection interval, the XSTOL has lower maintenance requirements than any comparable aircraft. The aircraft has been designed to be easily maintained and embodies over fifty years of knowledge and experience gained from previous models of Pacific Aerospace agricultural aircraft. These aircraft average five minute flight cycles with maximum loads and operate from remote semi-prepared strips in New Zealand hill country, all day every day. A tough proving ground.

#### EASY TO REFUEL AND CHECK

With its low wing the XSTOL is easy to refuel, wherever it is positioned. Pre-flight checks and refuelling can be carried out without a ladder, unlike high wing aircraft. Not only is turnaround faster, it's safer – especially in bad weather.





#### QUALITY COMPONENTS

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By utilising well proven, reliable and globally-supported systems – such as Pratt & Whitney Canada PT6A-34 turboprop engines, Hartzell props and Garmin avionics – we can ensure that high-quality, reliable support is always within reach anywhere in the world.



#### NEW SKYDIVE WORLD RECORD SET WITH XSTOL!

The XSTOL helped Jay Stokes to set a new world record for total number of skydives in one day. During a 24-hour period starting on September 8, 2006, Jay made an amazing 640 jumps. A major element in making this feat possible was aircraft support.

Jay declared that he would not have been able to achieve this record without the XSTOL as his jump platform. The XSTOL's rapid climb rate and ability to quickly descend with no open door speed restrictions helped Jay to attain more jumps. There is no other aircraft in this class that has better performance. The XSTOL continues to demonstrate that it's the best skydive aircraft in the world.

# VERSATILE ONE PLANE, SO MANY APPLICATIONS ...



#### PASSENGER / UTILITY

- Sets the benchmark for 10-seater STOL utility aircraft.
- Ample passenger leg room and luggage storage.
- Able to undertake mixed passenger/ freight roles.
- Can carry a load of passengers on one leg, then rapidly convert to an all-freight configuration for the next leg by stowing seats in a rear cabin compartment.
- Sub-dividable single compartment Cargo Pod with 1,000lb (454kg) capacity.
- Option of moulded or metal linings for increased durability.



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#### SKYDIVE

- Globally recognised as the ultimate skydiving platform.
- Achieve profit with small loads i.e make a profit with seven jumpers.
- Able to carry seventeen skydivers or six tandem teams.
- Unmatched ability to climb rapidly to jump height e.g. sea level to 12,000ft in ten minutes.
- Factory-installed skydiving door that can be operated by the pilot ensuring no open-door speed restrictions on descent.
- Climb and descent profile is about half the horizontal airspace of most other jump planes, assisting operation in noise-sensitive areas.
- Wide centre of gravity range making it a very stable jump platform.









#### FREIGHT

- Robust metal compartment lining is factory fitted.
- Optional wall-mounted track for use with cargo nets.
- Large 50" wide, 46.5" high (127cm x 118cm) cargo door.
- Single-compartment (sub-dividable) Cargo Pod with 1,000lb (454kg) capacity with access via three side cargo doors and one large rear ramp.
- Cargo compartment partition located behind the pilot providing load security.
- Wide centre of gravity range allowing for loading flexibility.

#### **AERIAL SURVEY**

- Superior stability even at low speed allows the aircraft to undertake survey roles usually reserved for helicopters.
- Factory-approved modifications support easy installation of camera holes in the floor of the aircraft.
- No requirement for control cable rerouting or any other customisation of the aircraft systems.
- Can be readily customer-modified for geophysical survey work.
- Electrically 'quiet' aircraft with minimal electro-magnetic interference and all major control systems mechanical rather than electric.
- The aircraft structure serves as an effective faraday cage blocking out external static electric fields.

#### AERIAL CROP DUSTING, SPRAYING OR FIRE FIGHTING

- Able to carry a 4,888lb (2,217kg) hopper.
- Effectively operates off short, narrow hill country air strips that are often situated on ridgelines.
- Operators commonly complete up to 17 cycles (load, take-off, dispense, land) per hour.
- Hopper can be removed without affecting the airframe, allowing versatility in the roles of the aircraft.
- Aircraft can be converted to another factory-approved configuration, maximising its useful life and resale value.

#### P-750 XSTOL KEY FEATURES

Easy access 'gull wing' crew doors.

High visibility cockpit for superior situation awareness for the pilot.

Well proven and globally supported Pratt & Whitney Canada PT6A-34 Turbine Engine producing 750shp.

Outer wing dihedral for lateral stability .

Thick cord wing for high lift.

Constant speed, full feathering and reversible prop for short-field performance. Large air intake is optimised for rapid climb, and provides RAM air and thrust recovery even at low forward speeds. An effective inertia separation system for FOD protection is incorporated in the inlet.







BendıxKıng.

by Honeywell

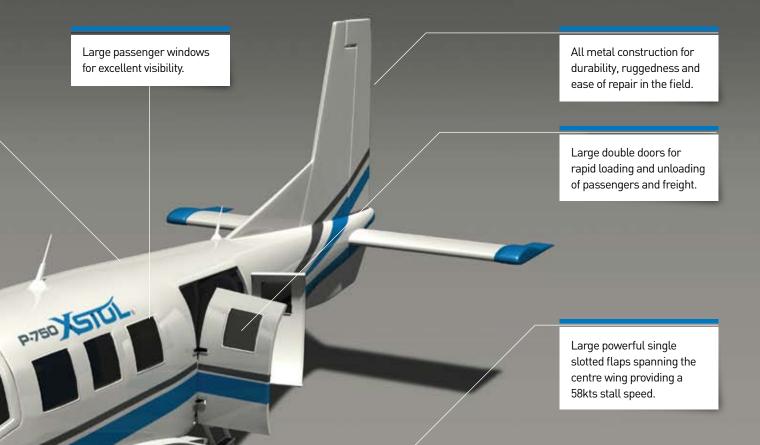
Easily removed engine

complete access to the

cowling allowing for

engine and systems.

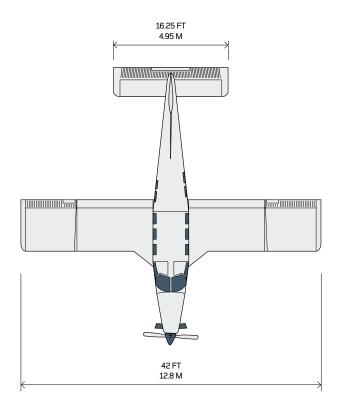
Large 240ft<sup>3</sup> cabin with the ability for it to be rapidly reconfigured between roles.



High volume (70ft<sup>3</sup>, 1,000lb) single compartment (removable divider nets) cargo pod with a hinged rear loading ramp able to take full sheets of plywood, roofing iron and other over sized items.

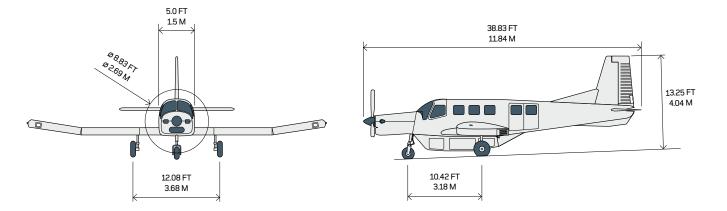
High strength fixed landing gear with oleo pneumatic shock strut allowing for customisation of the cylinder pressure to the conditions. Low wing for superior low speed stability, final approach visibility and ease of access for pre-flight checks, refuelling and maintenance.

## **EXTERNAL DIMENSIONS**

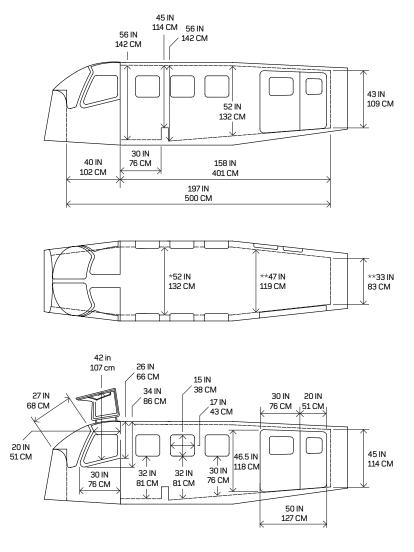


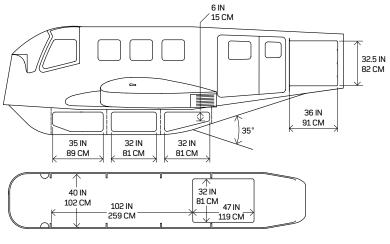
#### AREAS

WING GROSS	305.00 FT <sup>2</sup>	28.34 M <sup>2</sup>
NETT	267.80 FT <sup>2</sup>	24.88 M <sup>2</sup>
FLAPS	31.74 FT <sup>2</sup>	2.95 M <sup>2</sup>
AILERONS	21.94 FT <sup>2</sup>	2.04 M <sup>2</sup>
TAILPLANE	33.64 FT <sup>2</sup>	3.13 M <sup>2</sup>
ELEVATOR	27.92 FT <sup>2</sup>	2.59 M <sup>2</sup>
FIN	19.40 FT <sup>2</sup>	1.80 M <sup>2</sup>
RUDDER	11.70 FT <sup>2</sup>	1.09 M <sup>2</sup>
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### **INTERNAL DIMENSIONS**







\* Dimensions measured on top surface spar cover

\*\* Dimensions at cabin floor

## **TECHNICAL SPECIFICATIONS**

#### WEIGHT & BALANCE

BASIC EMPTY WEIGHT (Standard IFR)	3,300 LB*	1,497 KG*

\*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

CENTRE OF GRAVITY RANGE	100.5 to125 inches aft of datum	
Max. Useful Load	4,200 LB	1,905 KG
Max. Landing Weight	7,125 LB	3,232 KG
Max. Take-Off Weight	7,500 LB	3,402 KG
Max. Ramp Weight	7,540 LB	3,420 KG

#### **SPEEDS**

Never Exceed Speed (VNE)	170 KNOTS	315 KPH
	normore.	
Design Cruising Speed (VC)	140 KNOTS	259 KPH
Max. Manoeuvring Speed (V <sub>A</sub> )	131 KNOTS	243 KPH
Max. Flap Extended Speed (VFE)	120 KNOTS	222 KPH
Stall Speed (Idle Power) With Flaps Up (Vs)	58 KNOTS	107 KPH

#### RANGE

Max. Range At Optimum Speed, No Reserves at 15,000 FT	582 NM	1,079 KM
Endurance At Optimum Speed, No Reserve	5 HRS	
Average Fuel Consumption	50 US GAL/H	192 LITRES/H

#### PERFORMANCE

TAKE-OFF & LANDING PERFORMANCE Normal Conditions, 7500 LBS		
_ Take-Off Ground Roll At Sea Level, ISA	721 FT	220 M
Take-Off Distance To 15 M (50 FT), ISA	1,196 FT	364 M
Landing Ground Roll At Sea Level*	543 FT	166 M
Landing Distance From 15 M (50 FT)*	950 FT	289 M
* Reverse thrust selected on touchdown		
CLIMB (AT MTOW)		
Max. Rate Of Climb At Sea Level	1,067 FT/MIN	325 M/MIN
Max. Rate Of Climb At 8,000 FT	951 FT/MIN	290 M/MIN
Climb to 12,000 FT from brakes release	12 MIN	
ALTITUDE LIMITS		
Max. Operating Altitude	20,000 FT	6,096 M
Service Ceiling (At Max. Weight)	20,000 FT	6,096 M
NORMAL LOAD FACTORS		
Max. Positive G	+3.5 G	
Max. Negative G	-1.4 G	
Wing Loading	120.07 KG/M <sup>2</sup>	24.59 LB/FT <sup>2</sup>
Power Loading	10.0 LB / SHP	4.5 KG / SHP





For more information visit: www.xstol.com

#### PACIFICAEROSPACE

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