

P-750 **XSTOL** III

PERFORM
WHERE
OTHERS
CAN'T



PACIFIC AEROSPACE

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.



P-750 XSTOL^{III}

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 SIXTY 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 almost 4,000lb (1,814kg) 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 ULTIMATE 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

PACIFIC AEROSPACE

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 PAL 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

> CO-ORDINATES

06 30.10'S 145 02.02'E

> ALTITUDE

5,200ft / 1,585m

> TEMPERATURE

Average 30°C+ / 86°F+

> LENGTH

1,450ft / 442m

> SLOPE OVERALL

15% / max >18%

> TAKE-OFF PAYLOAD

3,900 lb/ 1,769 kg*

*Based on an aircraft with an Empty Weight of 3600lbs, equipped for Basic VFR flight.

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 3,900 LB / 1,769 KG,* GREATER THAN ITS EMPTY WEIGHT.

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

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.

XSTOL™ Performance Demonstration

AFRICA AEROSPACE & DEFENCE EXPO, AIR FORCE BASE YSTERPLAAT, CAPE TOWN, SOUTH AFRICA,

DATE: 19TH SEPTEMBER 2008 ELEVATION: 200FT (61M), WIND: 10KTS, TEMP: 12°C (53.6°F)

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 140ft (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.AEROSPACE.CO.NZ



104^{ft} / 32^m
TAKE-OFF



164^{ft} / 50^m
LANDING



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 airstrips, all day, every day, regardless of temperature and without compromising load.





EXIT

OPEN

TO OPEN THIS DOOR
PULL HANDLE

28V
DC

INSULATION
BATES
FOR GOOD CALL
www.plumbates.co.nz

MAXIMUM UTILITY THROUGH QUICK TURN- AROUND

A MULTI-TASKER
THAT MAKES THE
MOST OF EVERY
MINUTE.



The P-750 XSTOL is designed to get the job done and every attention has been given to ensure that it is a reliable aviation workhorse – there to get the 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 sixty 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

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.

VERSATILE

ONE PLANE, SO MANY APPLICATIONS

The P-750 XSTOL is the world's most versatile utility aircraft. This PT6 turbine powered aircraft has a unique quick-change modular floor system and easily removable role equipment, which allows the aircraft to be transformed rapidly between no less than ten distinct mission configurations.

The quick change, multirole floor allows P-750 operators to move easily between different role configurations to maximise aircraft utilisation. The different configurations include passenger/freight; agriculture solid and liquid; firebombing; survey geophysical and photographic; medical evacuation; skydiving; and surveillance, search & rescue.



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 the passenger seats in a rear cabin compartment.
- > No need for a tail stand when loading the aircraft.
- > Sub-dividable single compartment Cargo Pod with 1,000lb (454kg) capacity.
- > Option of moulded or metal linings in the cabin for increased durability.

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 seven 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/Cargo

- > 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 and 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.
- > No need for a tail stand when loading the aircraft.

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.

Agriculture – Solid / Liquid and Firebombing

- > 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

01

Easy access 'gull wing' crew doors.

02

High visibility cockpit for superior situation awareness for the pilot.

03

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

04

Outer wing dihedral for lateral stability.

05

Thick chord wing for high lift.

06

Constant speed, full feathering and reversible propeller for short-field performance.

3-Blade Standard
4-Blade Optional

07

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.

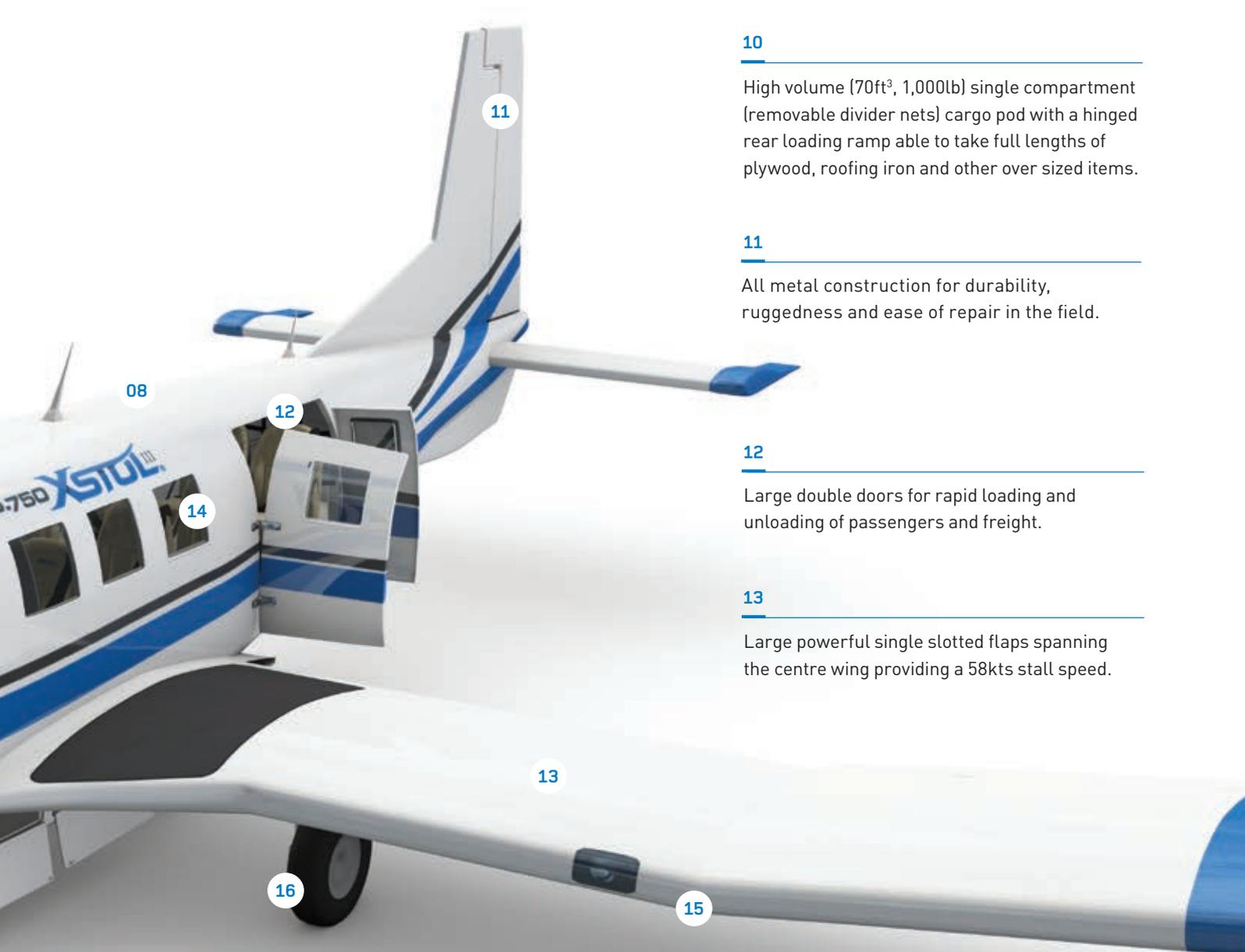
08

Large 240ft³ cabin with the ability for it to be rapidly reconfigured between roles.

09

Easily removed engine cowling allowing for complete access to the engine and systems.





10

High volume (70ft³, 1,000lb) single compartment (removable divider nets) cargo pod with a hinged rear loading ramp able to take full lengths of plywood, roofing iron and other over sized items.

11

All metal construction for durability, ruggedness and ease of repair in the field.

12

Large double doors for rapid loading and unloading of passengers and freight.

13

Large powerful single slotted flaps spanning the centre wing providing a 58kts stall speed.

16

High strength fixed landing gear with oleo pneumatic shock strut allowing for customisation of the cylinder pressure to the conditions.

High Flotation Wheel (optional). It will significantly improve soft ground performance and gives at least a 46% increase in the footprint tyre.

17

A quick change multi-role floor allows operators to move easily between different role configurations to maximise aircraft utilisation.

14

Large passenger windows for excellent visibility.

15

Low wing for superior low speed stability, final approach visibility and ease of access for pre-flight checks, refuelling and maintenance.

EXTERNAL DIMENSIONS

> WING GROSS

305.00 FT² 28.34 M²

> NETT

267.80 FT² 24.88 M²

> FLAPS

31.74 FT² 2.95 M²

> AILERONS

21.94 FT² 2.04 M²

> TAILPLANE

33.64 FT² 3.13 M²

> ELEVATOR

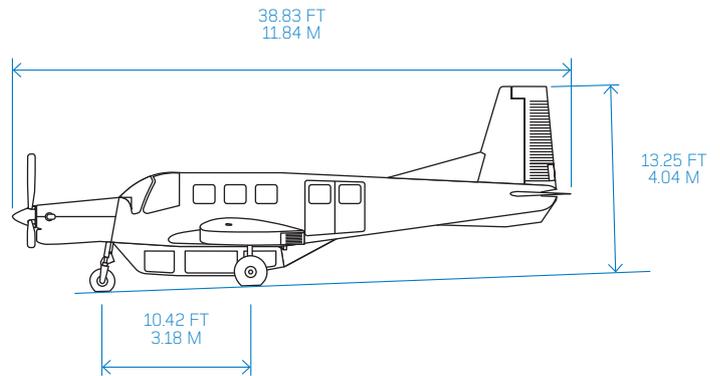
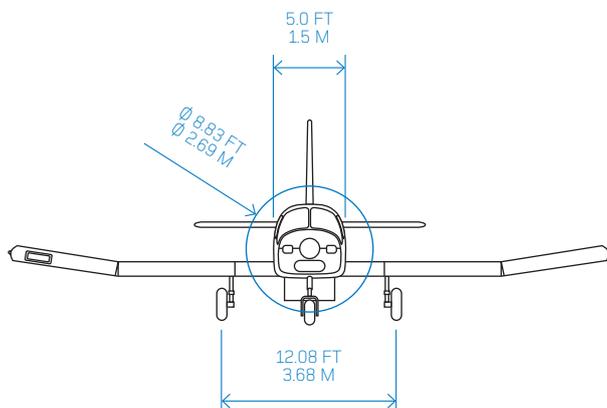
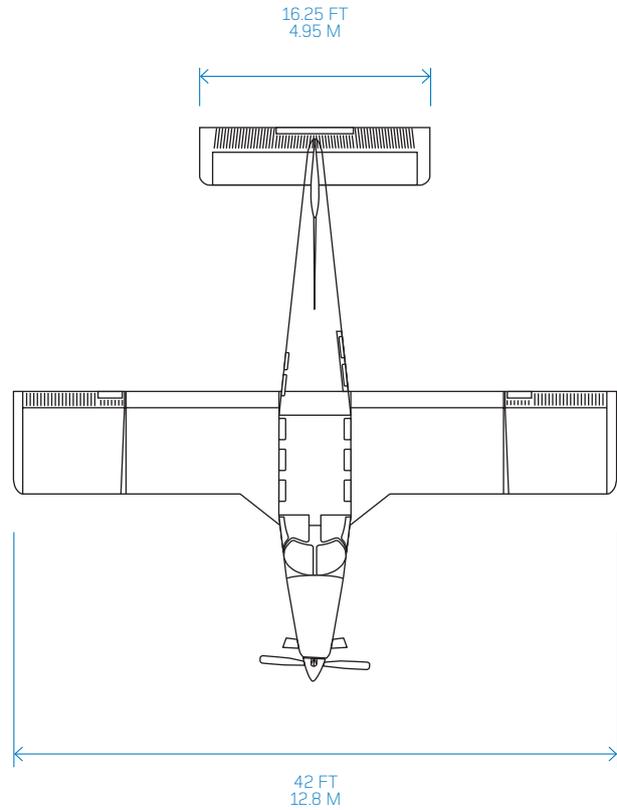
27.92 FT² 2.59 M²

> FIN

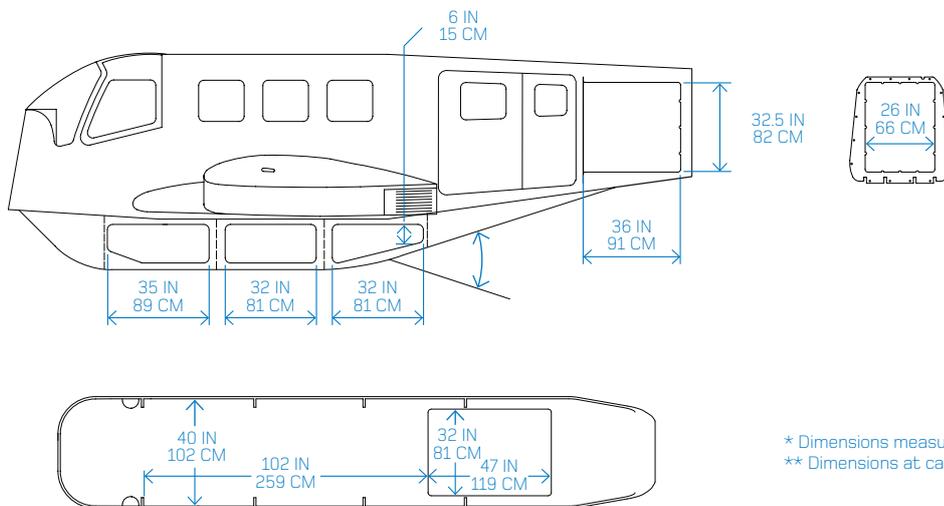
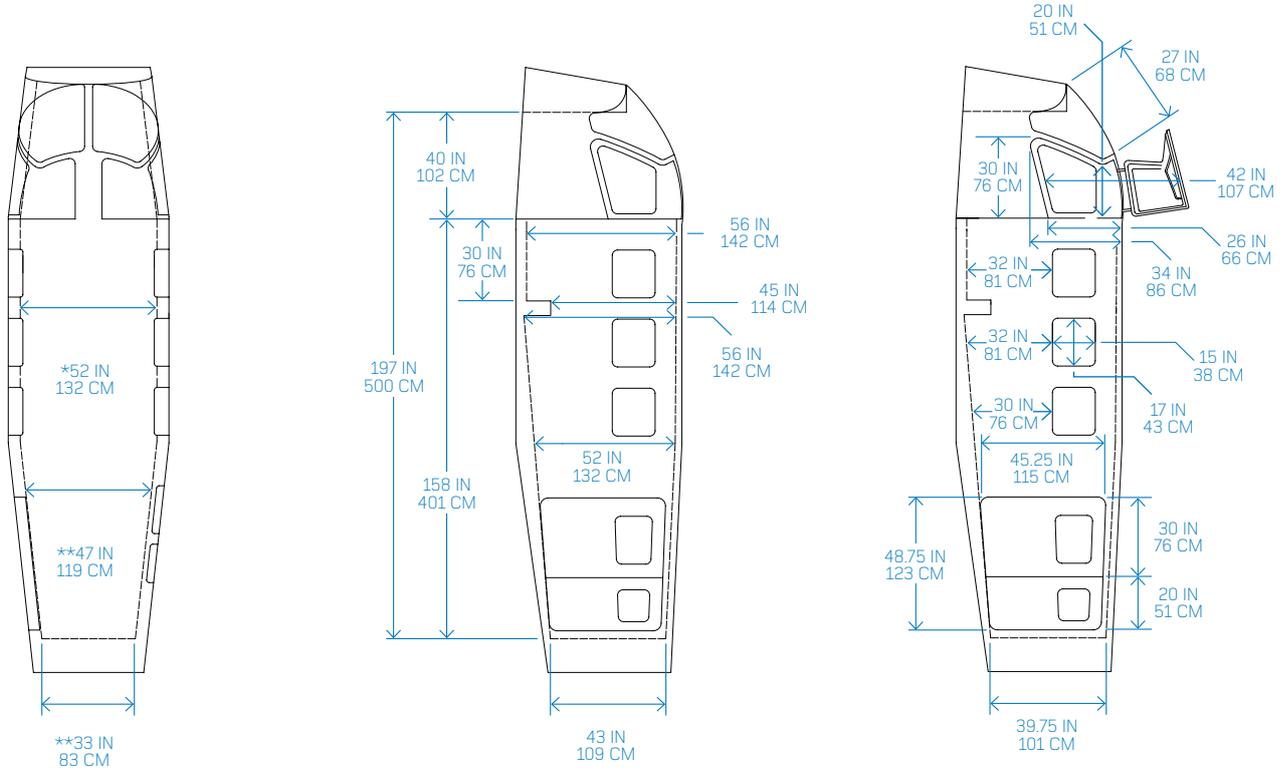
19.40 FT² 1.80 M²

> RUDDER

11.70 FT² 1.09 M²



INTERNAL DIMENSIONS



* Dimensions measured on top surface spar cover
 ** Dimensions at cabin floor

TECHNICAL SPECIFICATIONS

> WEIGHT AND BALANCE

BASIC EMPTY WEIGHT (Standard IFR)	3,600 lbs*	1,633 kgs*
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*Basic Empty Weight is complete aircraft, empty of usable fuel and without optional equipment, but including engine oil, unusable fuel. BEW will vary between aircraft serial numbers depending upon final configuration and equipment specification selected.

MAXIMUM OPERATING WEIGHTS

Maximum Ramp Weight	7,540 lb	3,420 kg
Maximum Take-Off Weight	7,500 lb	3,402 kg
Maximum Landing Weight	7,125 lb	3,232 kg
Maximum Useful Load	3,900 lb	1,769 kg
Centre of Gravity Range	102.8 to 124.60 inches aft of datum 2.3% to 28.5% MAC (Mean Aerodynamic Chord)	

> SPEEDS

TAS (True Air Speed) 10,000 FT	167 kts	309 km/h
Never Exceed Speed (VNE)	170 kts	315 km/h
Design Cruising Speed (Vc)	140 kts	259 km/h
Maximum Manoeuvring Speed (VA)	131 kts	243 km/h
Maximum Flap Extended Speed (VFE)	120 kts	222 km/h
Stall Speed (Idle Power) With Flaps Up (VS)	58 kts	107 km/h

> RANGE

Max. Range at Optimum Speed (nil wind, no reserves), 15,000ft.	1,172 nm	2,183 km
Endurance at Optimum Speed (no reserves)	8 hrs Standard	10 hrs w/ Aux.Fuel.
Average Fuel Consumption (optimum cruise settings)	49 US Gal/hr	184 Litres/hr
Fuel Capacity (useable)	330 US Gal	1,256 Litres
Max. Range with Aux. Fuel Tank fitted (102US.Gal/387L usable)**	1,400 nm	2,593 km

**Estimate based on optimum cruise settings, nil wind and nil reserves.

PERFORMANCE

> TAKE-OFF & LANDING PERFORMANCE

Nil wind, 7,500 MTOW, Aircraft optimised for STOL performance (flight test data not yet published in POH)

Take-Off Ground Roll at Sea Level, ISA	721 ft	220 m
Take-Off Distance To 15 m (50 ft), ISA	1,503 ft	458 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)

Maximum Rate of Climb at Sea Level	1,067 ft/min	325 m/min
Maximum Rate of Climb at 8,000 FT	951 ft/min	290 m/min
Climb to 12,000 FT From Brakes Release	14 min	

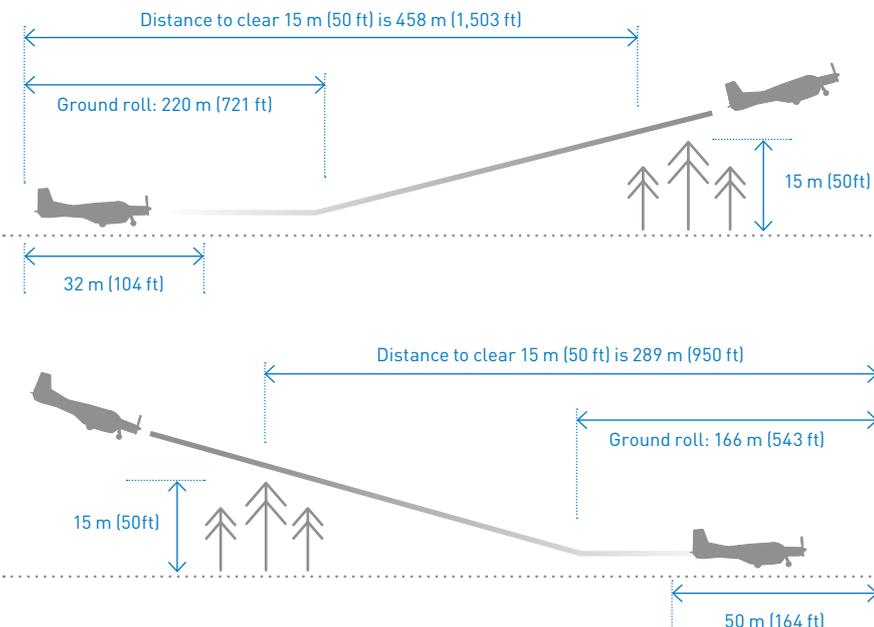
ALTITUDE LIMITS

Maximum Operating Altitude	20,000 ft***	6,096 m
Service Ceiling (at Max. Weight)	25,000 ft****	7,620 m

Demonstrated to 32,000ft. Approval pending for certification to 25,000ft. *Estimate based on previous flight testing.

CLIMB (AT MTOW)

Maximum Positive G	+3.5 G	
Maximum Negative G	-1.4 G	
Wing Loading	120.07 KG/M ²	24.59 LB/FT ²
Power Loading	10.0 LB/SHP	4.5 KG/SHP



XSTOL™ extreme demonstration
(refer to page 7)

THE ULTIMATE MULTI-ROLE AIRCRAFT QUICK CHANGE BETWEEN ALL MISSIONS

PASSENGER
+ FREIGHT



SURVEY
PHOTOGRAPHIC



AGRICULTURE
SOLID



SURVEY
GEOPHYSICAL



AGRICULTURE
LIQUID



SURVEILLANCE,
SEARCH
& RESCUE



FIREBOMBING



MEDEVAC



FREIGHT



SKYDIVING





