## THE SUPER VERSATILE JET AIR AMBULANCE













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#### A CLASS OF ITS OWN

### THE CRYSTAL CLASS

People become enchanted when they experience something as unique and out of reach as a Swiss mountain crystal.

Its elegance expresses something words cannot describe. The diverse and unmistakable shape of the crystal has always fascinated. Perhaps it's the hardness that conveys a sense of durability. Or because it is created deep within the mountain, emerging only after a long and arduous journey. Or maybe it's because the details of its origin and formation will forever remain a secret. Either way, one thing is for sure: its beauty sparks the imagination.

For some, Swiss mountain crystals are a symbol of strength and power. For others, their countless facets make them a symbol of variety and uniqueness.

Crystal seekers from the Swiss Alps – called "Strahler" – discover the crystals only after tremendous effort and endurance. Working high in the mountains, they must withstand every type of weather and bear any temperature before they can hold a crystal in their hands.

Our latest aircraft is just as versatile, powerful, and extraordinary as a Swiss mountain crystal: the Pilatus PC-24.





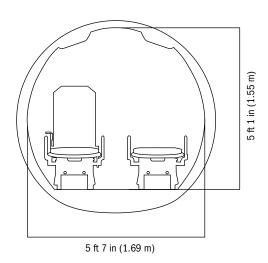












#### A PRIVATE HOSPITAL ROOM - WITH WINGS

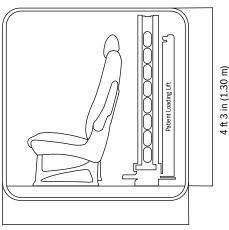
# WHEN SECONDS COUNT, COUNT ON THE SVJ

Every air ambulance cabin is developed for the specific purposes of the operator. It typically ranges from a two or three stretcher installation with four or six seats.

The seats are lightweight commuter types with quick release features for quick cabin reconfiguration. Two seats are adjacent to the front forward stretcher, and an additional seat faces aft towards the patient's head in case of resuscitation.

The aft of the cabin can accomodate either two stretchers with one additional seat, or one stretcher and up to three additional seats. The cabin can also be configured for special medical operations such as bariatric patient transport or inter-hospital transfers with Extracorporeal Membrane Oxygenation equipment (ECMO).

The PC-24 is designed to offer a higher class of air ambulance service – it's Crystal Class.



4 ft 1 in (1.25 m)

#### A PRIVATE HOSPITAL ROOM - WITH WINGS

# DON'T STRETCH YOUR PATIENT'S PATIENCE

Every iconic product incorporates at least one hallmark feature that dramatically differentiates it from the competition. Introducing the world's first air ambulance jet with a patient loading door. Its dimensions are simply outstanding, and its advantages are equally impressive.

Patients can be loaded and unloaded from the Super Versatile Jet by means of an electrical powered loading device or alternatively with a ramp – loading of patients has never been faster, safer or easier.







#### A PRIVATE HOSPITAL ROOM - WITH WINGS

## IMPRESSIVE ON PAPER -REMARKABLE ON DUTY

- Operate with a balanced field length as short as 2,930 feet (893 metres)
- Take off and land on paved and unpaved runways
- Have sufficient space and comfort for up to three patients, medical crew and systems
- Take on and land on paved and unpaved fullways
   Enjoy
- Load your patients quickly and easily with an electrical powered loading device or alternatively with a ramp
  - Enjoy superior versatility and flexibility and boost your response time

How many more reasons do you need?











#### AVIONICS AND POWERPLANT

## THE WORLD'S SMARTEST COCKPIT IN ITS CLASS

The PC-24's Advanced Cockpit Environment (ACE) sets the standard for high-tech simplicity.

Pilatus ACE is so capable and offers such a wealth of functionality that in its most basic configuration it boasts the most intuitive and user-friendly cockpit concepts ever seen in air ambulance aviation. Four 12-inch screens ensure that all relevant information is displayed in the right place and with no delay.

The Inertial Reference System guarantees excellent reliability and accuracy of altitude and navigation data. As standard equipment, the Pilatus ACE also includes a Synthetic Vision System, Autothrottle, Graphical Flight Planning, Traffic Collision Avoidance System I (TCAS I), and Localiser Performance with Vertical Guidance capability.



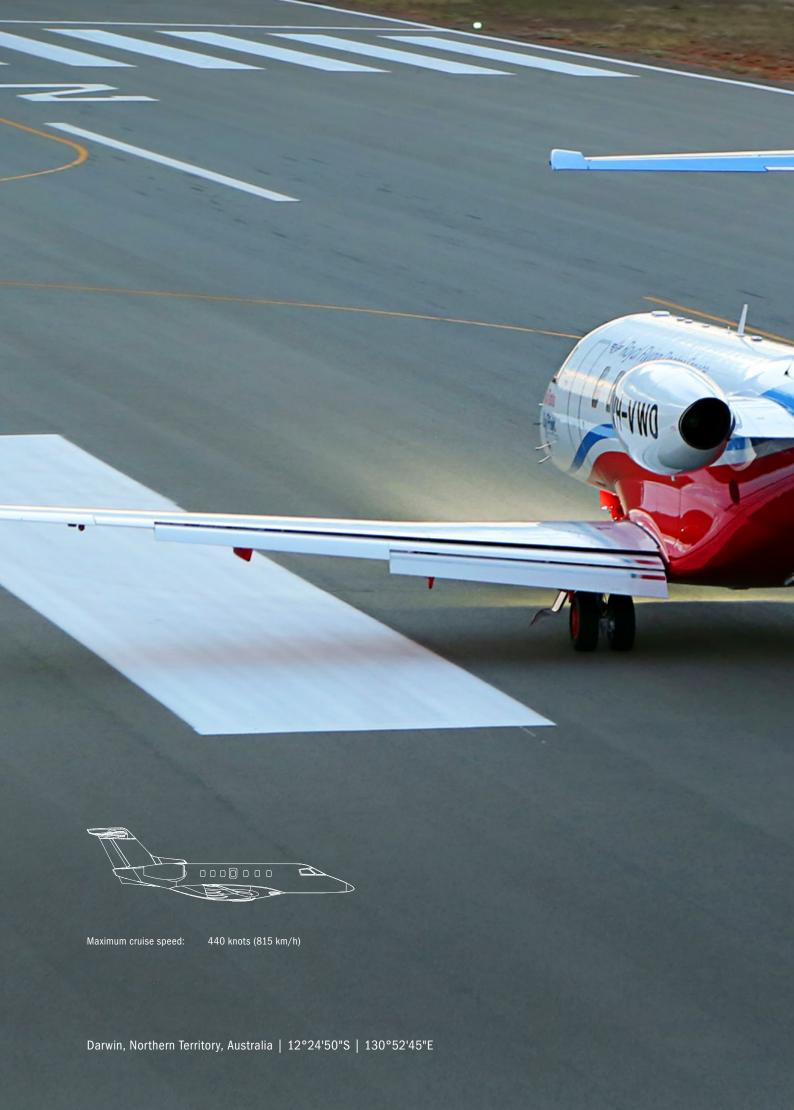
#### AVIONICS AND POWERPLANT

## CONSUMPTION, EMISSIONS, NOISE: ALL MINIMISED

At Pilatus, our legacy of innovative and efficient technology is driven by the world around us. To power the PC-24, we chose the Williams International FJ44-4A, a world-renowned power unit. It delivers ample power to support the PC-24's excellent field performance and enables a direct climb to the PC-24's operational ceiling.

But we wouldn't be Pilatus if we simply settled there – we wanted to go further.

The PC-24's unique Quiet Power Mode provides quiet, economical energy to power electrical systems – including heating and air-conditioning – independent of any source of ground power or a heavy expensive auxiliary power unit. It gives electrical power on the ground in remote regions where there may not be ground power carts available. These innovations offer more operational flexibility and higher fuel efficiency. Or to put it simply: super versatility and availabilty.





### IMPROVE HEALTH OUTCOMES TO YOUR COMMUNITY

The PC-24 with state-of-the-art air ambulance fit out that serves as an in-flight emergency ward. It can fly at a top speed of 440 knots per hour (815 kilometres per hour) and has a range of up to 2,000 nautical miles (3,704 kilometres). The cabin altitude can be maintained at sea level up to flight level 230 ensuring your patient's comfort.

With the PC-24's performance, you'll reach the person in need much faster. Its incredibly slow approach

speed and sophisticated braking/lift dump system reduce the landing distance to an absolute minimum, keeping every landing safe.

The Super Versatile Jet can almost halve the time for long-haul, patient-critical scenarios and boost the air ambulance operator's response time.

Provide the most advanced health care service to your community - with the PC-24.





**CUSTOMER SUPPORT** 

### PILATUS - YOUR TRUSTED PARTNER IN SAVING LIVES

We've gained a deep understanding of the needs and expectations of our customers. How do we know this? In survey after survey, PC-12 owners and operators rank Pilatus customer service the highest in the industry.

As an owner of an aircraft made by Pilatus, you will receive personal attention through our global service network. Training, spare parts and customer programmes are just a mouse click or phone call away. In addition, each Pilatus aircraft comes with one of the strongest new aircraft warranties in the industry.

Pilatus makes every effort to ensure maximum uptime for your aircraft. In short, we worry about the aircraft so you don't have to. As you can see, our customer service is more than first class - it's Crystal Class.



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## OVER-ENGINEERED -AND PROUD OF IT

Switzerland is known for several things – watches, mountains, cheese, chocolate and, of course, mountain crystals.

To the general public, aircraft aren't on that list. But aviation enthusiasts know that Switzerland is home to a world-famous aircraft innovator.

A team of over 300 highly skilled engineers was tasked with the development of the PC-24, the next great

aircraft from Pilatus. True to our heritage, the PC-24 is brilliant not only in performance – it's also brilliantly practical. And that's why we've labelled it a Super Versatile Jet.

The numerous components of each aircraft are brought together by experienced technicians who take pride in their work. Every PC-24 that leaves our production line is uniquely tailored to meet the air ambulance operator's individual needs and requirements.



#### SWISS CRAFTSMANSHIP

### THE PILATUS STORY

We're not as old as a Swiss mountain crystal, but our history is just as rich. Since 1939, Pilatus has built a reputation for constructing aircraft that excel in demanding conditions without compromising speed, safety or comfort.

The Pilatus Porter PC-6 has been heralded as one of the most extraordinary bush planes ever built and was also known as the world's leading STOL. First flown in 1959, it was one of the longest produced aircraft of all time. Our military training aircraft, the PC-7 MkII, the PC-9 M, and the PC-21 make up a product family with

which thousands of air force pilots around the world have earned their wings. The PC-12 is the benchmark for outstanding versatility, performance, reliability and operational flexibility. As such, it is one of the most popular turbine-powered single-engine turboprop aircraft on the market today and is in operation as air ambulance aircraft all over the world.

From our proud heritage comes knowledge: the PC-24 embodies all of this experience and represents the pinnacle of over 80 years of precision aircraft manufacturing.



### WHY OWN A PC-24 AIR AMBULANCE?

## TEN REASONS

#### 1. MORE AIRPORTS

No other air ambulance jet can operate from paved and even unpaved surfaces as short as 2,930 feet (893 metres) – this gives you access to almost 20,000 additional airports worldwide.

### 2. SPACIOUS CABIN

No other air ambulance jet offers this much cabin space with an entirely flat floor in its category. The cabin can be equipped with medical interiors ranging from a role change capability with executive interior to a fully dedicated air ambulance aircraft.

### 3. HIGH-TECH MEDICAL SYSTEMS

No other air ambulance jet in this class features such a fully dedicated interior for intensive medical operations.

### 4. PATIENT LOADING DOOR

No other air ambulance jet includes as standard a generous patient door with stretcher loading system that allows patient loading head forward and fully horizontal.

### 5. ADVANCED COCKPIT

No other air ambulance jet features a more capable standard cockpit environment at this price level.

#### 6. IMPROVED SAFETY

No other air ambulance jet at this price level offers such a combination of high-tech and simplicity that helps improve situational awareness and safety.

### 7. QUIET POWER MODE

No other air ambulance jet offers aircraft cooling or heating on the ground under its own power with the revolutionary Quiet Power Mode.

### 8. BETTER RESPONSE TIME

No other air ambulance jet is a Super Versatile Jet designed to give you maximum operational flexibility with highest possible speed and range.

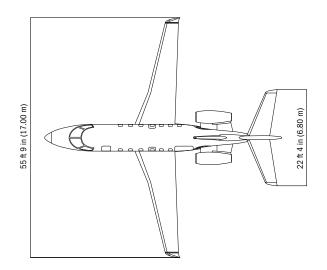
### 9. CRYSTAL CLASS SUPPORT

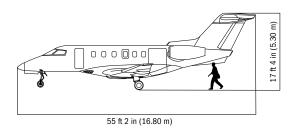
No other air ambulance jet offers Crystal Class Support business aviation's most comprehensive warranty and service package, provided by a global network ranked number 1 in the industry for 19 consecutive years.

### 10. SWISS QUALITY

No other air ambulance jet is made in Switzerland by a manufacturer with an unmatched reputation for precision such as ours – we're proud to be called over-engineered.

# DIMENSIONS AND WEIGHTS







## **DIMENSIONS (EXTERIOR)**

Wing span	55 ft 9 in	17.00 m	
Length	55 ft 2 in	16.80 m	
Height	17 ft 4 in	5.30 m	
Horizontal tail span	22 ft 4 in	6.80 m	

## **DIMENSIONS (INTERIOR)**

`	,	
Cabin length (cockpit/cabin partition to aft pressure bulkhead)	23 ft 0 in	7.01 m
Cabin width	5 ft 7 in	1.69 m
Cabin floor width	3 ft 10 in	1.16 m
Cabin height (continuous flat floor)	5 ft 1 in	1.55 m
Cabin volume (cockpit/cabin partition to aft pressure bulkhead)	501 ft <sup>3</sup>	14.20 m <sup>3</sup>
Passenger door height	4 ft 5 in	1.34 m
Passenger door width	2 ft 0 in	0.60 m
Patient loading door height	4 ft 3 in	1.30 m
Patient loading door width	4 ft 1 in	1.25 m

## **WEIGHTS**

Maximum ramp weight	18,400 lb	8,345 kg
Maximum take-off weight	18,300 lb	8,300 kg
Maximum landing weight	16,900 lb	7,665 kg
Maximum zero fuel weight	14,220 lb	6,450 kg
Usable fuel (888.5 U.S. gal)	5,964 lb	2,705 kg

### **POWERPLANT**

Manufacturer Williams International Model FJ44-4A

Normal take-off thrust (per engine) 3,420 lbf 1,551 kgf

Automatic thrust reserve allowing

thrust increase to 3,600 lbf 1,633 kgf

Engine control through dual channel FADEC

Aircraft cooling or heating on the ground under own

power (Quiet Power Mode)

TBO/HSI/inspection 5,000/2,500/300 h

## **PERFORMANCE**

### TAKE-OFF DISTANCE

Balanced field length 2,930 ft 893 m (MTOW, ISA, sea level, dry paved runway)

Balanced field length 4,980 ft 1,518 m (MTOW, ISA +20 °C, 5,000 ft, dry paved runway)

### RATE OF CLIMB

(200 KCAS/M 0.6)

MTOW, sea level 4,070 ft/m 20.70 m/s FL 300 1,967 ft/m 10.00 m/s Time to climb sea level to FL 450 26 min (direct climb)

### **CRUISE**

Maximum cruise speed (FL 280) 440 KTAS 815 km/h

### PAYLOAD/RANGE

(Payload and Range vary for each air ambulance configuration and will be determined during the specification process.)

### **ALTITUDE**

Maximum certified altitude 45,000 ft 13,716 m

Maximum altitude single engine service ceiling 30,000 ft 9,144 m

### LANDING DISTANCE

Over 50 ft (15 m) obstacle 2,375 ft 724 m (MLW, ISA, sea level, dry paved runway)

### STALL SPEED

Landing configuration 82 KIAS 151 km/h (MLW, ISA, sea level)

### WING AREA AND LOADING

Wing area  $332.71 \text{ ft}^2$   $30.91 \text{ m}^2$  Wing loading  $55 \text{ lb/ft}^2$   $269 \text{ kg/m}^2$ 

# **AVIONICS AND MISCELLANEOUS**

### PILATUS ACE AVIONICS SYSTEM

ACE stands for "Advanced Cockpit Environment" system specifically developed for the Pilatus PC-24

Key features that are all part of standard equipment:

- · Four 12-inch LCD displays
- Inertial Reference System (IRS) and Attitude Heading Reference System (AHRS)
- · SmartView Synthetic Vision System
- Traffic Alert and Collision Avoidance System I (TCAS I)
- · Graphical Flight Planning
- · Autothrottle
- · Lateral Precision Vertical (LPV)
- Fully integrated Automatic Flight Control System (AFCS)
- Dual Flight Management System (FMS)
- Dual Mode S transponders with Automatic
   Dependent Surveillance Broadcast (ADS-B OUT)

### KINDS OF OPERATIONS

- Visual Flight Rules (VFR)/Instrument Flight Rules (IFR) day/night
- Private (FAR Part 91, EASA Part-NCC) and commercial (FAR Part 135, EASA Part-CAT) operations
- · Flight into known icing conditions
- · Single and dual pilot operations
- Operations from paved and unpaved surfaces
- · Steep approach

### **MISCELLANEOUS**

Airframe maintenance schedule 600 h/annual
Design service life 30,000 h/30,000 landings
Certification EASA CS 23; FAA FAR 23,
Commuter Category

- Dual wheel main landing gear; low pressure tyres (72 psi)
- · Single-point pressure refuelling port

# TYPICAL CONFIGURATIONS

All PC-24 Air Ambulance configurations are developed based on each customer's specific requirements. Typical configurations are shown below.



1



2

## 1 | 3 STRETCHER + 4 CREW

This configuration is a full air ambulance interior, featuring three light weight stretchers and up to four seats conveniently located to treat your patients. One seat is located at the head of the right hand forward stretcher allowing direct access for resuscitation.

## 2 | 2 STRETCHER + 6 CREW

Two stretchers on the right hand cabin side and up to six seats maximise your operational flexibility for patients and medical crews. Quick release features at seats and stretchers allow for quick configuration changes of the cabin – and without maintenance action.



3

## **ROLE CHANGE**

This option exploits the multi-purpose of the executive interior. The cabin can be reconfigured for medical retrievals with a stretcher or a self-contained intensive care section. Up to six seats may remain in the cabin for the medical crew or patient's relatives.

# 3 STRECHER AND 4 CREW



### **INTERIOR**

- Up to 3 light weight stretchers
- Up to 4 light weight seats
- · Sealed utility floor
- · Numerous cabinets and storage units
- · Ceiling rails with IV-hooks
- · Wall mounted supply panels
- · Lights above the seats and stretchers
- · Washable interior liners

### **MEDICAL SYSTEMS**

- 7,500 litre oxygen supply
- · Redundant suction system
- · Redundant pressurised air system
- · 240V AC/28V DC electrical supply
- USB charging ports
- · Separate battery for independent supply
- · Dimmable cabin lights
- · Lights for patient and entrance area



## **COMMUNICATION**

- · Cabin intercom for medical crew
- Bose active noise cancelling headsets on all seats
- · Cabin to cockpit call feature
- · Cabin Satcom
- · Cabin wireless Internet
- · UHF or VHF systems

## LIFT

- Electrically powered by emergency medical system battery
- · Fully horizontal and head forward patient loading
- · Stowage aft of cabin
- Easy setup

# 2 STRECHER AND 6 CREW



### **INTERIOR**

- Up to 2 light weight stretchers
- Up to 6 light weight seats
- · Sealed utility floor
- · Numerous cabinets and storage units
- · Ceiling rails with IV-hooks
- · Wall mounted supply panels
- · Lights above the seats and stretchers
- · Washable interior liners

### **MEDICAL SYSTEMS**

- 7,500 litre oxygen supply
- · Redundant suction system
- · Redundant pressurised air system
- · 240V AC/28V DC electrical supply
- USB charging ports
- · Separate battery for independent supply
- · Dimmable cabin lights
- · Lights for patient and entrance area



## **COMMUNICATION**

- · Cabin intercom for medical crew
- Bose active noise cancelling headsets on all seats
- · Cabin to cockpit call feature
- · Cabin Satcom
- · Cabin wireless Internet
- · UHF or VHF systems

## LIFT

- Electrically powered by emergency medical system battery
- · Fully horizontal and head forward patient loading
- · Stowage aft of cabin
- Easy setup

# ROLE CHANGE



## **INTERIOR**

- · Up to 2 stretchers
- Up to 6 executive seats
- · Lonseal rubber flooring
- · Numerous cabinets and storage unit
- Equipment rails with attachment points for medical equipment
- · Lights above the beds

### **MEDICAL SYSTEMS**

- 3,500 litre oxygen system
- Electrically heated drawer for plasma and transfusion fluids
- · Four power outlets installed in the upper sidewall
- · Auxiliary cabin bus power system



## **COMMUNICATION**

- · Cabin intercom for medical crew
- $\boldsymbol{\cdot}$  Bose active noise cancelling headsets on all seats
- · Cabin to cockpit call feature
- · Cabin Satcom
- · Cabin wireless Internet
- · UHF or VHF systems

## LIFT

Stretcher system for easy patient loading and unloading

### **CONTACT US**

# FLY CRYSTAL CLASS

# PLEASE CONTACT US FOR MORE INFORMATION.

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Founded in 1939, Pilatus Aircraft Ltd is the only Swiss company to develop, produce and sell aircraft to customers around the world: from the legendary Pilatus Porter PC-6 to the best-selling single-engine turboprop in its class, the PC-12, and the PC-21, the training system of the future. The latest development is the PC-24 – the world's first ever business jet for use on short unprepared runways. Domiciled in Stans, the company is certified to ISO 14001 in recognition of its efforts for the environment. The Pilatus Group includes two independent subsidiaries in Broomfield (Colorado, USA) and Adelaide (Australia). With over 2,000 employees at its headquarters, Pilatus is one of the largest employers in Central Switzerland. Pilatus provides training for about 120 apprentices in 13 different professions – job training for young people has always been a very high priority at Pilatus.

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