

 Crafted in Switzerland

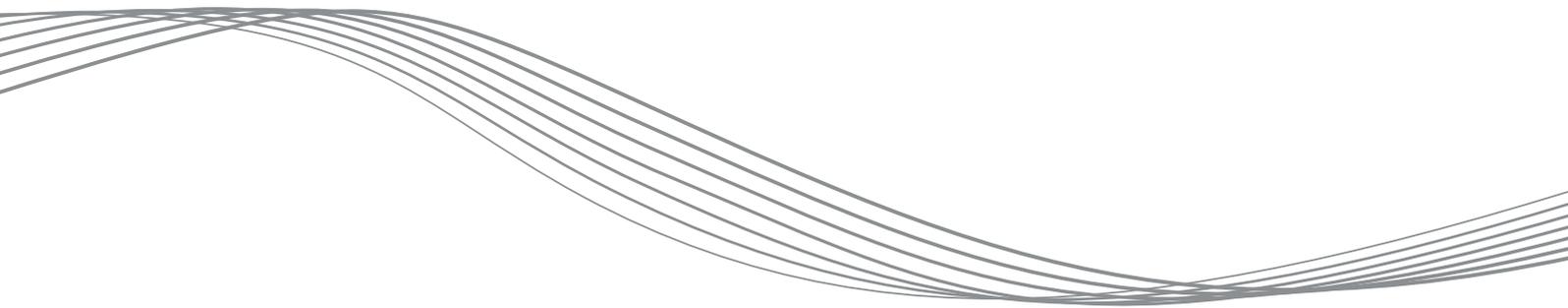
PC-7 MKX

THE SMART BASIC TRAINER

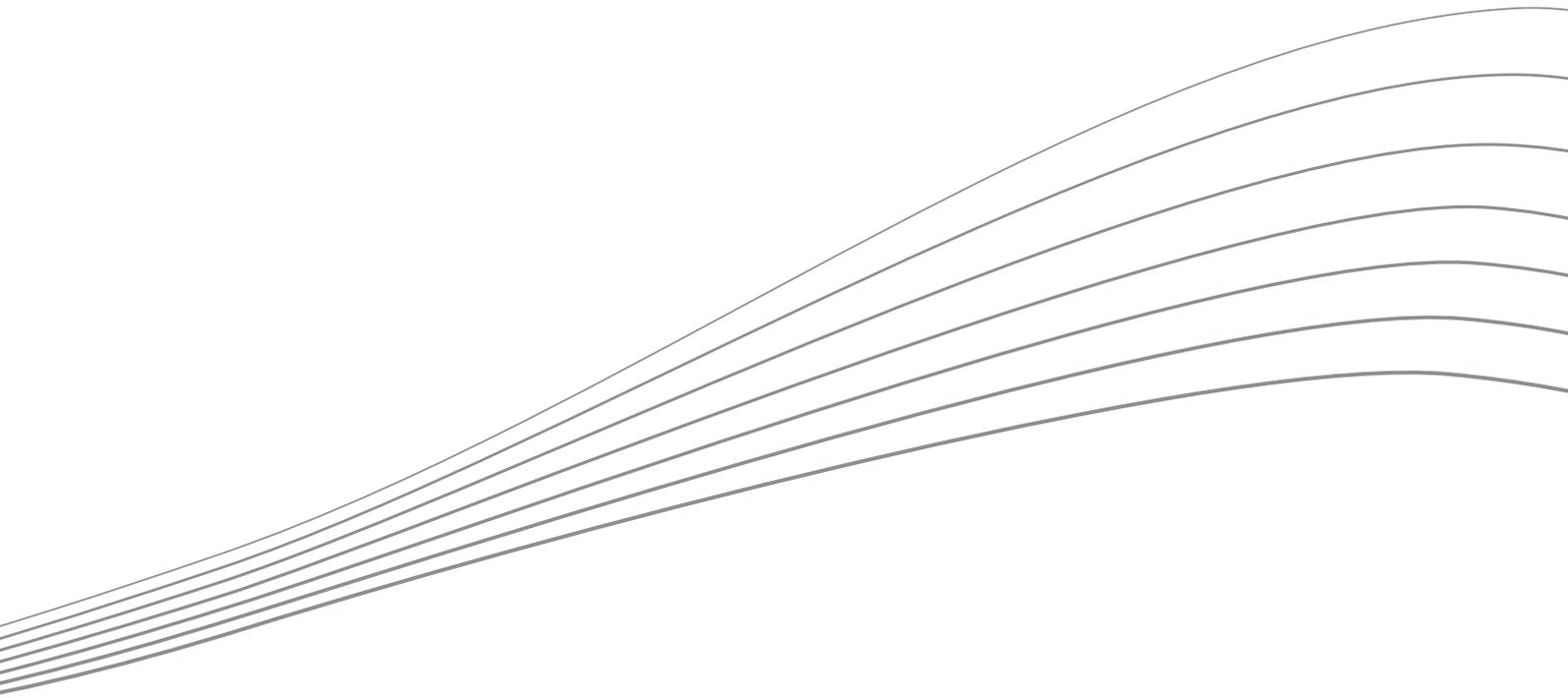


 **PILATUS** 

SMART TRAINING FOR SMART AIR FORCES



PC-7 MKX





Randa, Switzerland | 46°5'34"N | 7°49'67"E

SUPERIOR TRAINING VALUE	
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Engelberg, Switzerland | 46°44'65"N | 8°26'51"E



SUPERIOR TRAINING VALUE

WE INVENTED THE BASIC TRAINER. AGAIN.

Modern air forces are challenging suppliers to develop cost effective advanced technological training solutions. The PC-7 MKX comes with an exceptional standard of equipment, performance, and cost-effectiveness for this class of training aircraft. With its worldwide proven Pratt & Whitney Canada PT6A-25C engine, it provides the lowest engine operating costs of all turboprop trainer aircraft.

A state-of-the-art cockpit with smart avionics is at the core of the PC-7 MKX. Based upon the technology of our flagship, the PC-21, the cockpit is centred on a

three-display philosophy utilising the next generation of high definition displays.

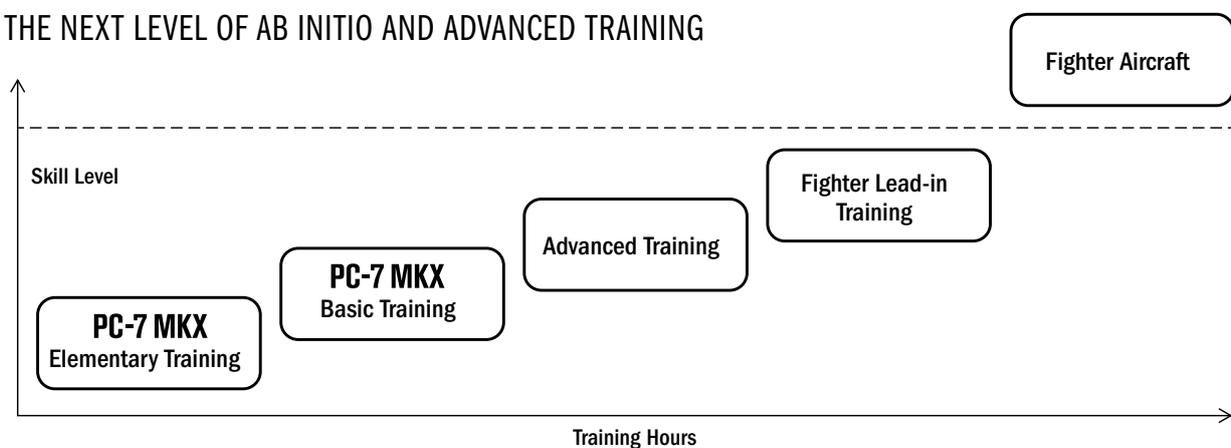
It enables the student an easy entry into the world of modern avionics, while practising vital flying skills using a proven airframe with benign and forgiving flying characteristics.

The PC-7 MKX can be used to train the broadest possible range of aircrew, making it the ideal basic training aircraft for air forces around the world.



Lauterbrunnen, Switzerland | 46°34'51"N | 8°8'53"E

THE NEXT LEVEL OF AB INITIO AND ADVANCED TRAINING



SUPERIOR TRAINING VALUE

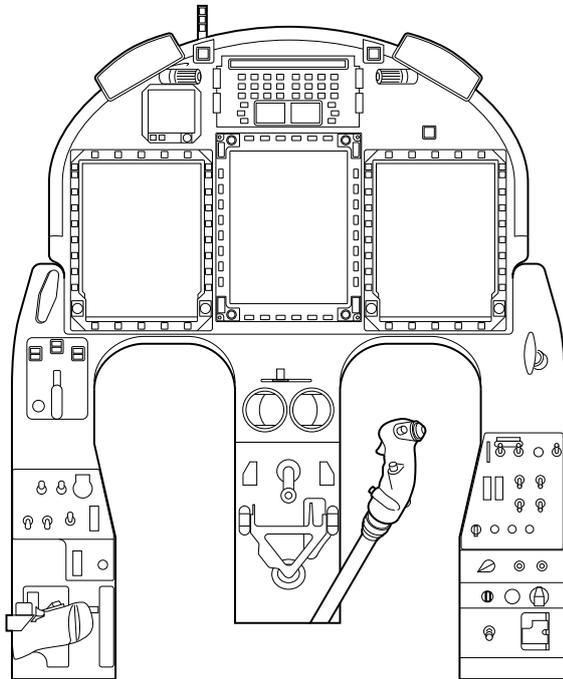
THE ULTIMATE MILITARY PILOT GENERATOR

The PC-7 MKX is based on a proven and easy to fly platform to teach ab initio students. It comes with an exceptional, state-of-the-art standard of equipment in this class of training aircraft.

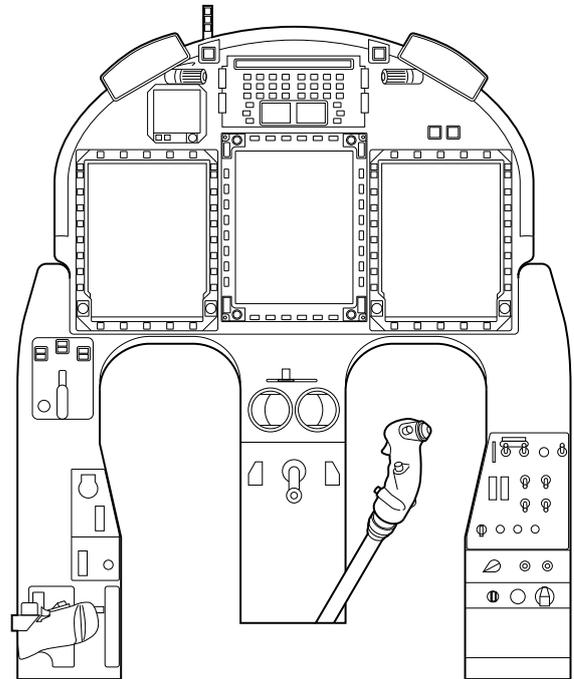
Offering a reliable and economic training platform, the docile behaviour of the PC-7 MKX in the hands of a beginner provides a confidence-building environment for inexperienced students. With its highly cost-efficient

PT6A-25C engine with 700 shaft horse power, it provides sufficient power even for advanced training.

Pilatus is the world's only aircraft manufacturer to offer a seamless Training System for all phases of military instruction. A unique 2-platform approach facilitates transition of a student pilot straight into a fifth generation front line asset, or streaming rotary and transport pilots after phase two or three.



Front Cockpit



Rear Cockpit

AVIONICS AND MISSION CAPABILITY

SMART TECHNOLOGY AT YOUR FINGERTIPS

The PC-7 MKX's smart avionics suite offers a broad capability, allowing maximum flexibility for use in a wide variety of training missions.

The cockpit layout is similar to advanced training and fighter platforms. This ensures that the student can easily transition to these platforms when entering the next phase of training. The PC-7 MKX avionics capability is designed as a comprehensive baseline configuration with various add-on options such as synthetic vision system, traffic advisory system,

autopilot, cockpit camera and mission debriefing system to meet specific training needs. All these systems prepare student pilots for a new generation of avionics, exposing them to the type of information and workload they are likely to encounter in future aircraft.

Only with the PC-7 MKX, you get an ultra-modern, smart Basic Trainer cockpit with a highly professional software exclusively developed by and for military pilots.



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ENT COMM ILS TCN TPDR I/C 5
W 4 5 6 E CLR MODE FUEL MSN MRK
7 8 9 0 BACK NAV A-A A-G C2 0
0 C1

10MI 301 ON (PRESET) CON2 SQ2 ON GUARD

PFD MASTER TOTAL DISABLE CAPACITY 1000 (SET-4) 130 (LEGAL)



DEFOG FOOT OFF

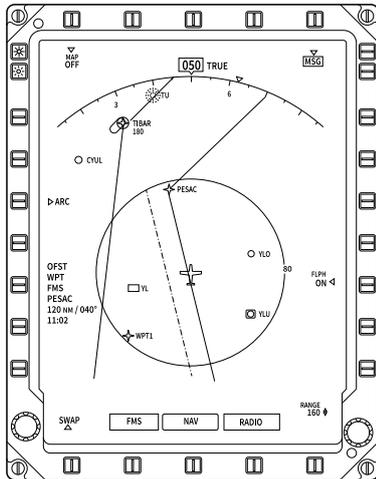
PEDAL ADJUST

C1 125.000 C2 126.950 8

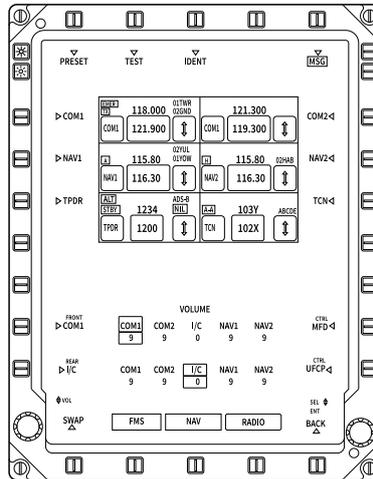
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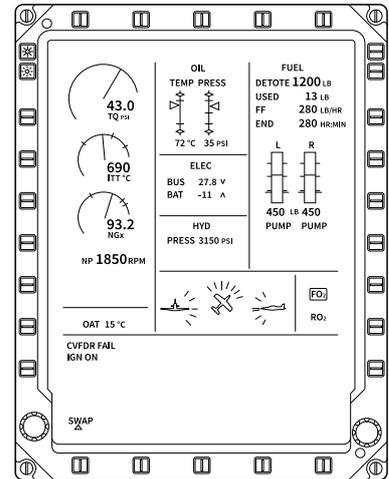




Navigation



Communication



Engine Indicating and Crew Alerting System

AVIONICS AND MISSION CAPABILITY

SO FORWARD-THINKING THAT YOU'LL NEVER LOOK BACK

The cockpit features a large primary flight display and multi functional displays to give students the earliest possible exposure to the technology found in today's front line assets. The primary flight display allows selection of various flight modes, whilst the left and right displays features a moving map for navigation, a Flight Management System and an Engine Indicating and Crew Alerting System.

Systems can be operated using the bezel keys, or the left multi functional display with help of a touch-screen capability. The up-front-control-panel also features displays to allow selection of frequencies, transponder codes and other flight relevant data.

The smart software used in the PC-7 MKX does not have a civilian background. It is highly professional avionics software with a primarily military focus. This ensures your pilots receive integrated, conformal, incremental military-oriented training - from the beginning.

Today's state-of-the-art fighter aircraft, helicopters and transport planes are equipped with all of the above systems. Students are therefore well prepared to make efficient use of these tools.

AVIONICS AND MISSION CAPABILITY

PROFESSIONAL AIR FORCES USE STATE-OF-THE-ART EQUIPMENT

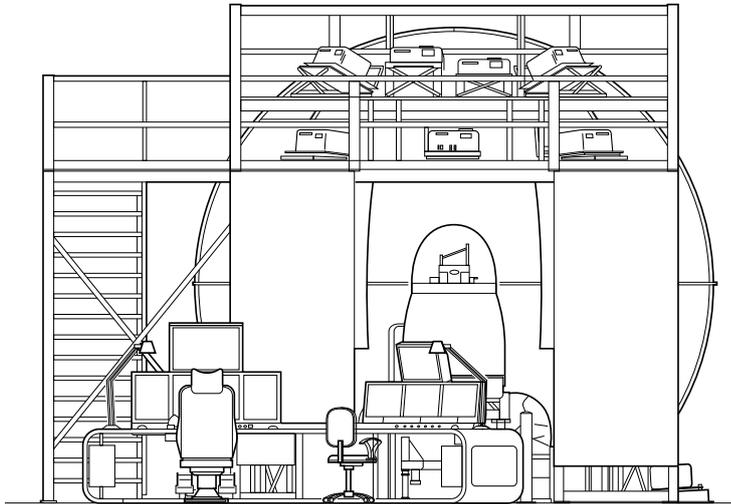
The PC-7 MKX is designed to teach basic, yet essential skills that must become second nature for every military pilot. The handling qualities of the PC-7 MKX allow unrestricted use by even the novice student with ample margin for error. The smart avionics and on-board systems enable the PC-7 MKX to be employed in the following phases of training:

- navigation and instrument flying
- aerobatics and formation flying
- use of airspace and mission planning and debriefing

After training on the PC-7 MKX, students are capable of safe and professional aircraft operation in military and civil environments – the first step in becoming a successful military aviator and the basis for the following phases of training.







GROUND-BASED TRAINING

IT'S THE NEXT, NEXT GENERATION OF TRAINING

The full flight simulator is one of the cornerstones of the PC-7 MKX Training System. Pilatus offers a wide range of flight simulation systems designed to provide effective and efficient support for training today's pilots.

The simulator provides an immersive training experience that uses cutting-edge visual systems, accurate flight dynamics and on-board systems models. Networking capabilities for every conceivable training exercise are also available.

The simulator provides pilots with in-depth knowledge of the PC-7 MKX and its smart avionics systems whilst also allowing them to cover all the required training topics, from basic to advanced manoeuvres.

A powerful instructor station allows monitoring, recording and debriefing of all exercises. All relevant emergency situations can be realistically simulated to train pilots to address and resolve even the most complex situations.



GROUND-BASED TRAINING

SMARTERPIECE

One key objective of a modern Training System is to produce a highly trained pilot capable of meeting the demands of flying today's sophisticated aircraft. With increasing cost of equipment, resources and time, this goal has to be achieved in the most economical way. Preparation on the ground saves perspiration and failure in the air. By the time students commence flying, they should be fully conversant with systems and avionics functionality. The PC-7 MKX Ground-Based Training System translates student learning into an airborne environment.

While designing the integrated Training System it was recognised that flexibility is essential. Customer requirements, resources and budgets will obviously vary. We therefore attach great importance to offering tailored solutions. A comprehensive set of training products is available to cover all aspects of ground-based training. From the simplest type of training aid, virtual reality tools through to a full flight simulator, all training equipment is of the highest quality and is designed to support integrated, progressive learning.



≡PILATUS≡



Langebaan, South Africa | 33°9'18"S | 18°4'58"E

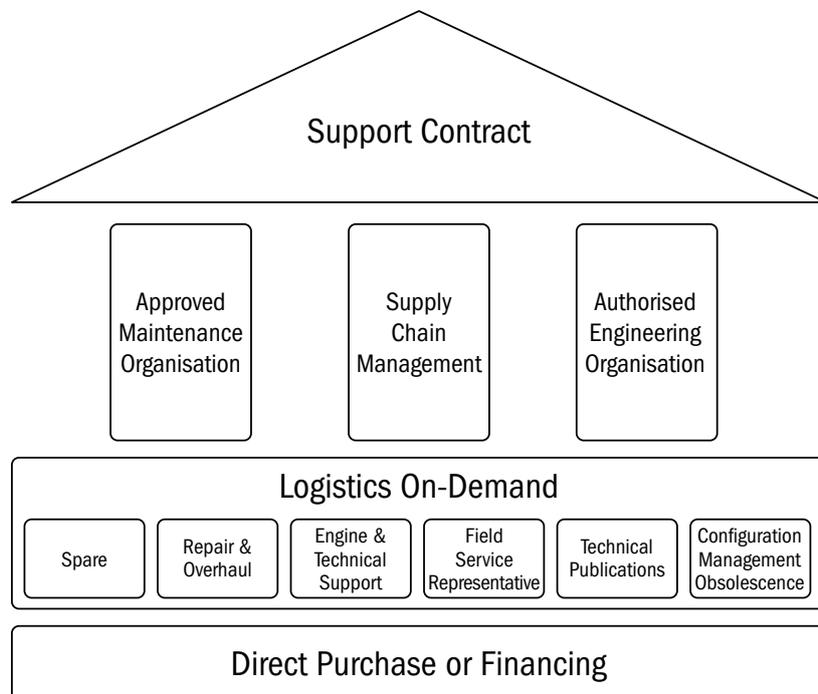
INTEGRATED LOGISTICS SUPPORT

THINK ABOUT A BASIC TRAINING SYSTEM. IS THIS WHAT YOU GET?

Long-term support is a critical element to be considered during the aircraft selection process. Pilatus has built its reputation and much of its success on the customer support and services provided to a large fleet of military trainer aircraft around the world.

Support is very much tailored to requirements, and we recognise that there is no perfect 'one size fits all' solution. Support is adapted over time as requirements change. Pilatus has established solid solutions by

supporting a very large number of basic trainer aircraft around the world. While some of those are managed through ad hoc support on demand, most customers opt for a full performance based service where Pilatus guarantees availability of aircraft or flight hours. The air force's responsibilities are reduced to provision of pilots and facilities. Other customers have a hybrid of these two arrangements with a partial performance service like spares availability, with other elements such as maintenance or manpower provided on demand.





A PROVEN TRAINING SYSTEM

PILATUS – A WORLD-RENOWNED MANUFACTURER

Since 1939, Pilatus has built a reputation for constructing aircraft that excel in demanding conditions without compromising safety, performance or comfort.

Our first sustained success came with the Pilatus P-2 and P-3, used by the Swiss Air Force. Highly successful regionally, these trainers provided Pilatus with the experience it needed to grow to a global level.

Our military training aircraft are used by thousands of air force pilots around the world. Pilatus has a long

history in assisting air forces to train their front line pilots. Customers rely on us to provide them with a world-class Training System.

From this proud heritage comes knowledge: both the PC-7 MKX and PC-21 embody this experience and represent the pinnacle of over 80 years of precision training aircraft manufacturing. Align and integrate your training system into the network of Pilatus operators – on the same professional level.

Rickenbach, Switzerland | 47°12'42"N | 8°9'14"E



A PROVEN TRAINING SYSTEM

WHY QUALITY IS KEY

A trainer aircraft is put through thousands of landings, some of which may not be the smoothest, all in the normal course of allowing students to accumulate personal flying experience. A high quality training aircraft is essential for such demanding operations. With its lightweight aluminium structure, high propeller ground clearance, and a robust undercarriage, the PC-7 MKX is built to last.

The design of the PC-7 MKX uses conventional semi-monocoque construction for the wing, fuselage and empennage. The primary structure is built of aluminium alloy sheet and extrusion. Combined with precision

workmanship, these features provide a high degree of interchangeability as well as easy parts replacement. All metal components are treated against corrosion, protecting the PC-7 MKX for all types of climates and the hardest training missions.

With the PC-7 MKX you don't experiment: it is an exceptionally proven trainer aircraft built on a solid certification foundation. You will be provided with all the support you need over its entire lifecycle. This aircraft is guaranteed to deliver a lifecycle of at least 30 years, as evidenced by other air forces that rely on the PC-7.





Goms, Switzerland | 46°28'49"N | 8°12'18"E

WHY OWN THE PC-7 MKX?

TEN REASONS

1. STATE-OF-THE-ART TRAINING

The PC-7 MKX is optimised for use in the primary and basic sectors of military pilot training. It is the ideal tool for streaming young pilots into their future assignments, be it a fighter, multi-engine or rotary platform.

2. SMART AVIONICS

The avionics suite of the PC-7 MKX is ultra-modern. The smart software does not have a civilian background. It is highly professional avionics software developed with a focus on primarily military use. It will effortlessly prepare the student for the next training segment on the way to the front line.

3. PROVEN TRACK RECORD

The PC-7 MKX is based on the proven PC-7 MkII trainer platform in use all over the world. Like its predecessors, the PC-7 MKX offers unbeatable reliability which results in constant availability in all climatic environments.

4. TOP PERFORMANCE

700 shaft horse power and 300 knots top speed: the PC-7 MKX has the unsurpassed aerodynamic performance in this class of trainer aircraft on the market, pushing the speed and climb rate into a domain for best possible training success.

5. SAFETY FIRST

The PC-7 MKX is the only training aircraft in this class that is equipped with world-renowned Martin Baker ejections seats and proven Pratt & Whitney Canada engine. The benign handling of the PC-7 MKX ensures safe operation at all times - even in the hands of a beginner.

6. SUPERIOR TRAINING VALUE

The PC-7 MKX dramatically cuts the total cost of training student pilots to front-line standards with the lowest life-cycle cost of any platform in its class.

7. SWISS QUALITY

A trainer aircraft is put through thousands of landings, some of which may not be the smoothest. A high quality training aircraft with aluminium structure is essential for such demanding operations. Pilatus has been producing and selling aircraft worldwide since 1939, earning a reputation for excellence.

8. ONE-STOP SHOP

Pilatus provides all the elements required for efficient pilot training: aircraft, ground-based training systems, documentation, engineering support, supply chain management, maintenance and supervision.

9. FIRST-CLASS SUPPORT

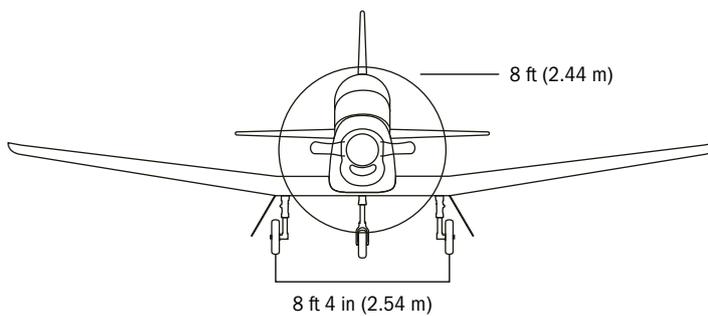
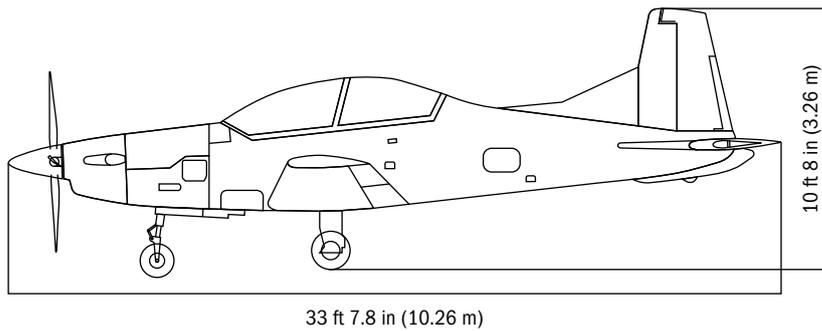
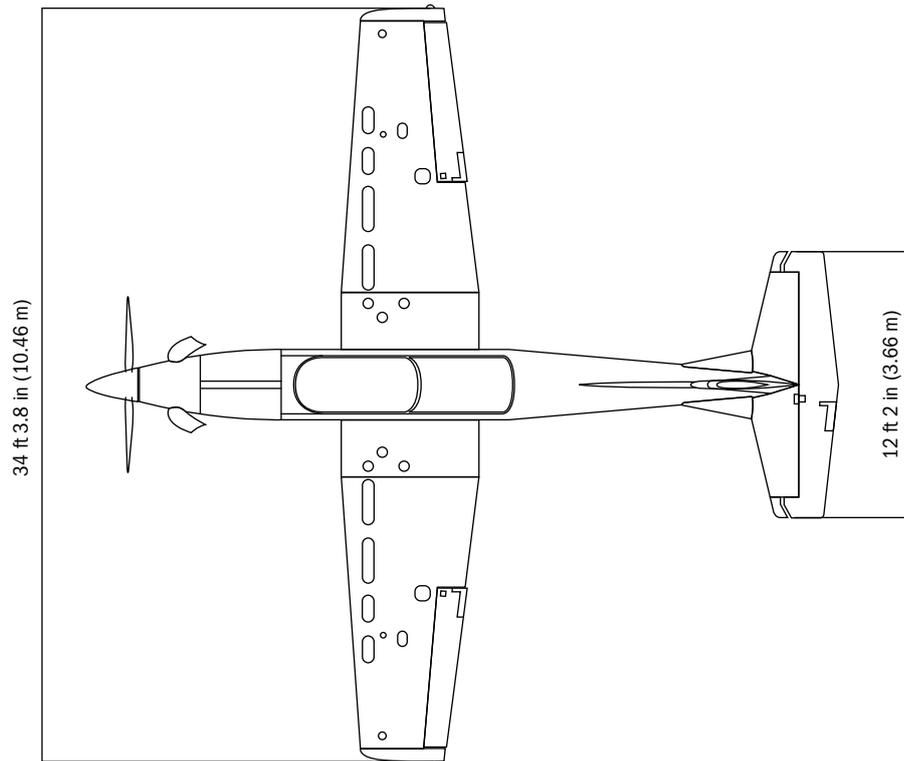
Don't experiment: you will be provided with all the support you need over the entire lifecycle of the PC-7 MKX. We will support your PC-7 MKX for as long as it is part of your training solution. Pilatus offers integrated service from spare parts to complete maintenance solutions based on individual requirements.

10. RISK-FREE ACQUISITION

The PC-7 MKX is built on a solid certification foundation. This aircraft is guaranteed to deliver a lifecycle of at least 30 years. Pilatus is an independent Swiss company operating from neutral Switzerland. Your data are protected and you retain full data sovereignty. Always.

FACTS AND FIGURES

DIMENSIONS AND WEIGHTS



DIMENSIONS (EXTERIOR)

Wing span	34 ft 3.8 in	10.46 m
Horizontal tail span	12 ft 2 in	3.66 m
Fuselage length	33 ft 7.8 in	10.26 m
Fuselage width	3 ft 2 in	0.97 m
Propeller diameter	8 ft 0 in	2.44 m
Wing projected area	175.27 ft ²	16.28 m ²

WEIGHTS

Maximum operating weights (for acrobatic category and with underwing stores):

	Acrobatic category		With underwings stores	
Maximum ramp weight	5,203 lb	2,360 kg	6,305 lb	2,860 kg
Maximum take-off weight	5,181 lb	2,350 kg	6,283 lb	2,850 kg
Maximum landing weight	5,181 lb	2,350 kg	6,283 lb	2,850 kg
Maximum zero fuel weight	4,409 lb	2,000 kg		

ALTITUDE

Maximum operating altitude	25,000 ft	7,260 m
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SPEEDS

Equivalent air speeds at maximum operating weights

Acrobatic Category (5,181 lb/2,350 kg)

Maximum operating speed (<i>VMO</i>)	300 kt	556 km/h
Maximum operating mach (<i>MMO</i>)	0.60 M	
Stall speed with flaps and gear down (<i>VSO</i>)	69 kt	128 km/h

OPERATING TEMPERATURE

Minimum	-55° C	-67° F
Maximum	+50° C	-122° F

LOAD FACTOR

	Acrobatic Category	Utility Category
Maximum positive	+7.0 g	+4.5 g
Maximum negative	-3.5 g	-2.25 g
Maximum positive (<i>flaps extended/landing gear down</i>)	+2.0 g	+2.0 g
Maximum negative (<i>flaps extended/landing gear down</i>)	0 g	0 g

FACTS AND FIGURES

PERFORMANCE

TAKE-OFF AND LANDING

Take-off ground roll (<i>sea level</i>)	935 ft	285 m
Take-off distance (<i>50 ft/15m obstacle</i>)	1,510 ft	460 m
Landing ground roll (<i>sea level</i>)	1,110 ft	338 m
Landing distance (<i>50 ft/15m obstacle</i>)	2,264 ft	690 m

CLIMB

Maximum rate of climb at maximum power:

Sea level	2,675 ft/min	815 m/min
5,000 ft	2,345 ft/min	715 m/min
10,000 ft	1,900 ft/min	580 m/min
20,000 ft	945 ft/min	290 m/min

CRUISE

Maximum cruise speed:

Sea level	240 KTAS	445 km/h
10,000 ft	251 KTAS	465 km/h
20,000 ft	238 KTAS	441 km/h

SUSTAINED LOAD FACTOR

Sea level	3.2 g
10,000 ft	2.5 g
20,000 ft	1.7 g

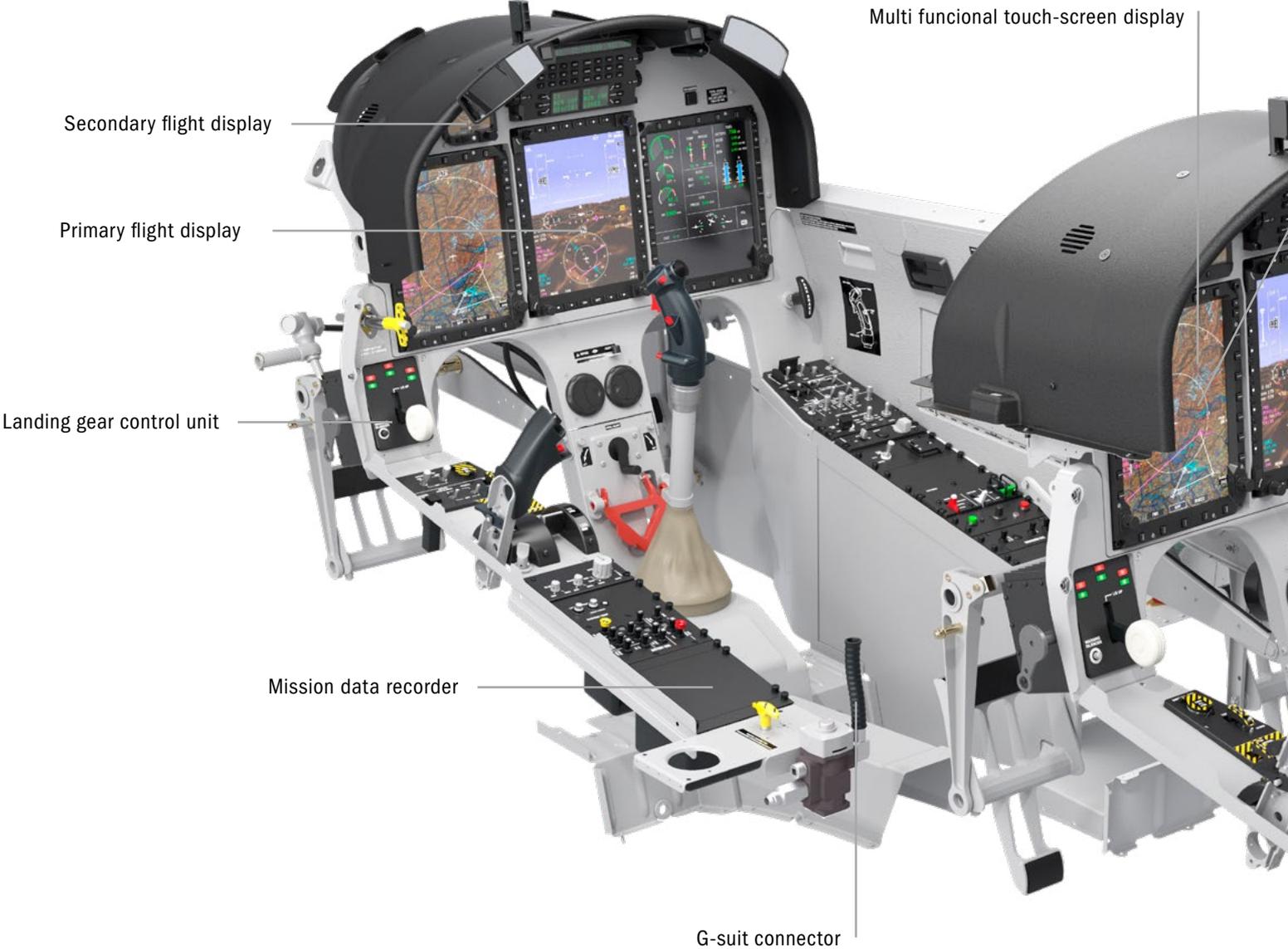
CERTIFICATION

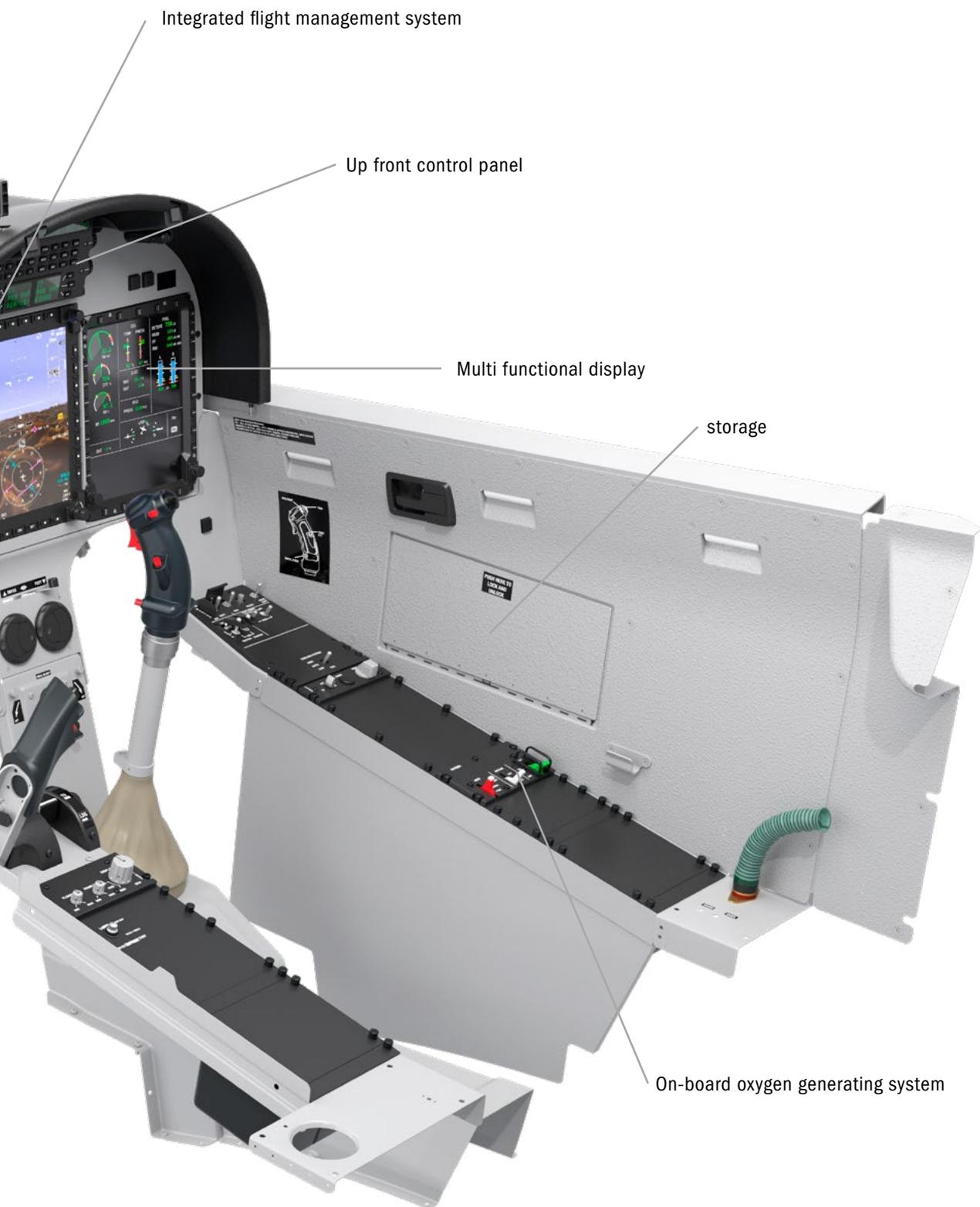
Federal Aviation Regulation Part 23. The PC-7 MKX is fully civil certified by using the PC-7 MkII type certificate.



FACTS AND FIGURES

COCKPIT ENVIRONMENT





Integrated flight management system

Up front control panel

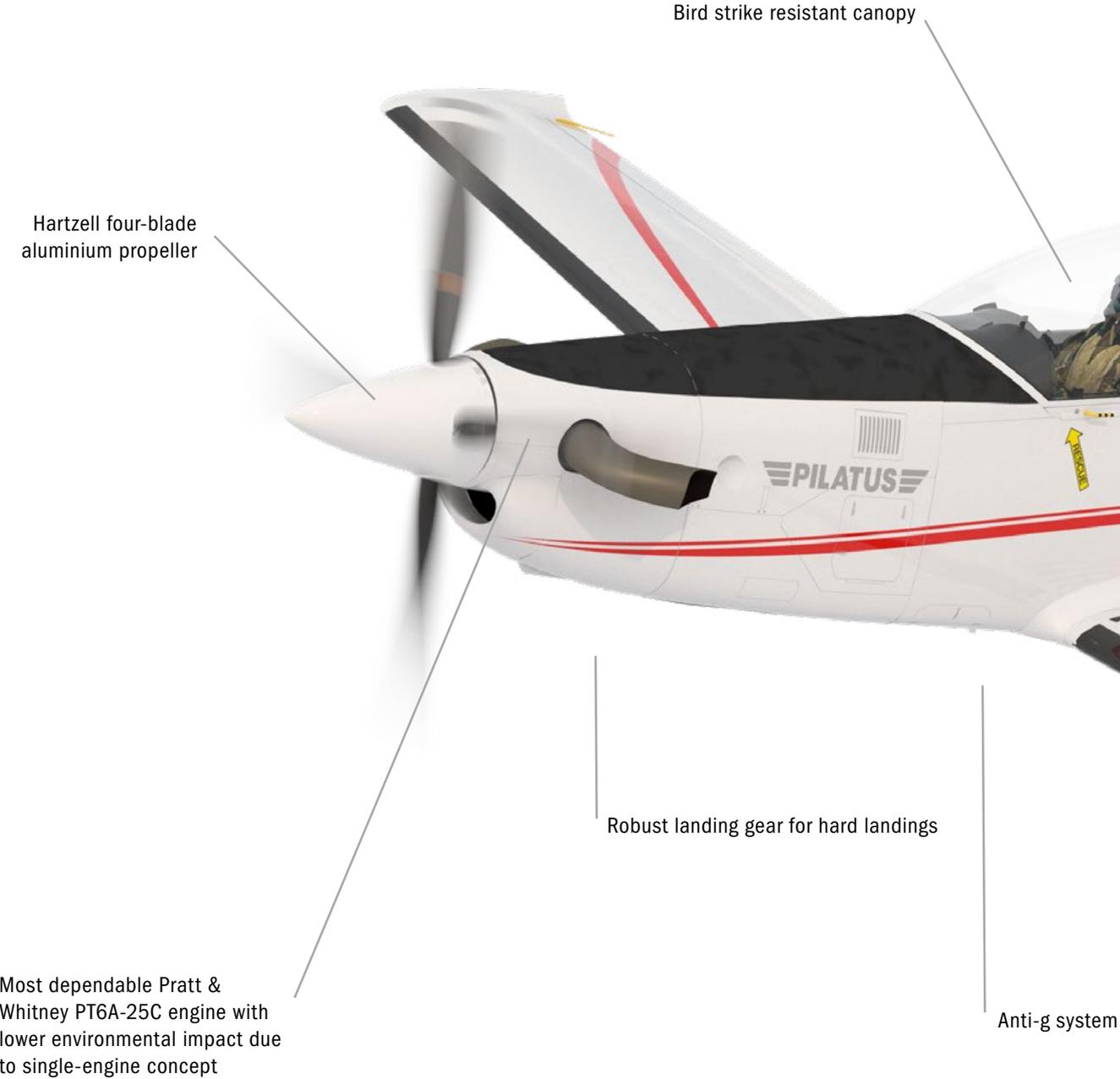
Multi functional display

storage

On-board oxygen generating system

FACTS AND FIGURES

AIRCRAFT SYSTEMS



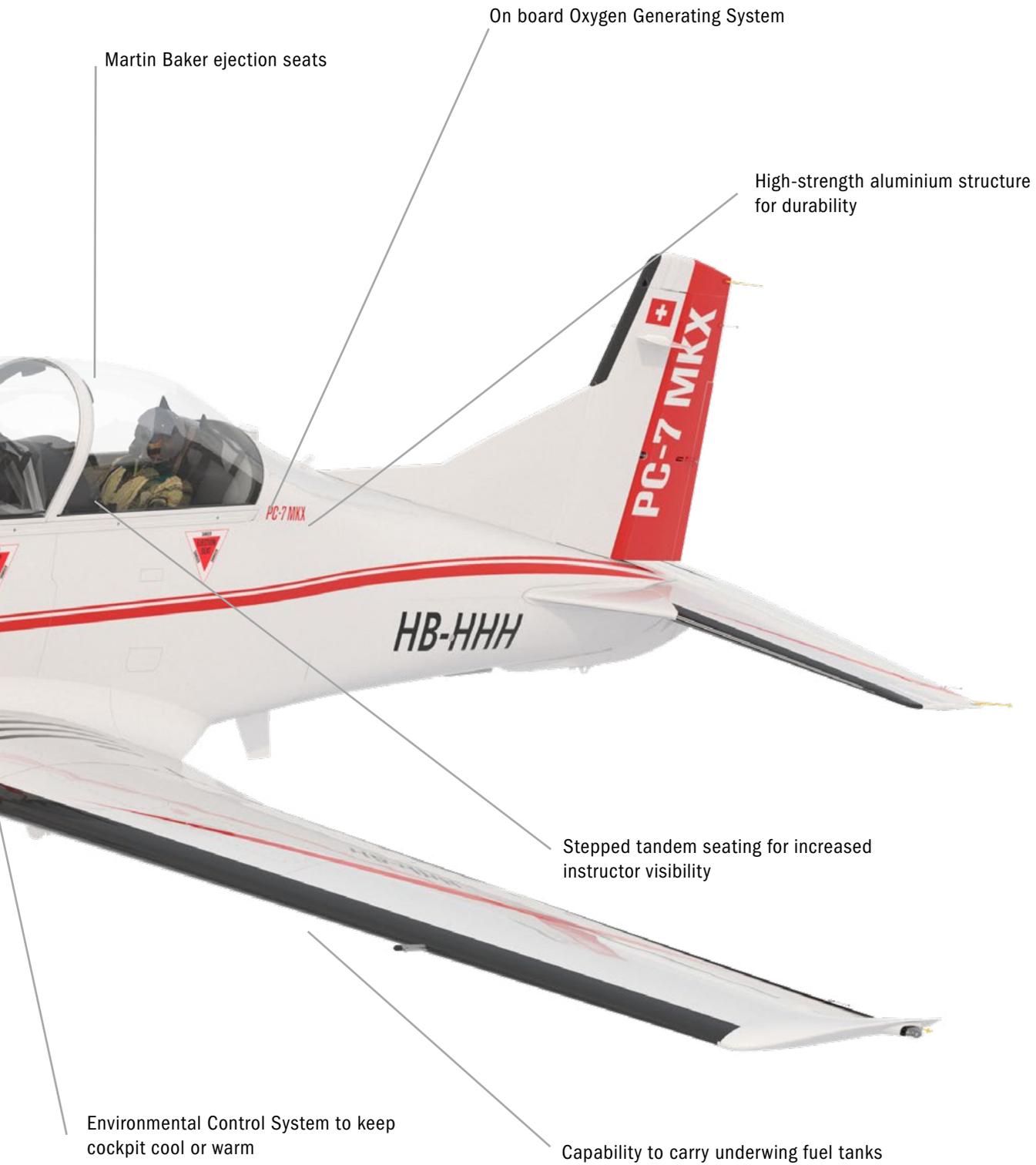
Hartzell four-blade aluminium propeller

Bird strike resistant canopy

Most dependable Pratt & Whitney PT6A-25C engine with lower environmental impact due to single-engine concept

Robust landing gear for hard landings

Anti-g system



Martin Baker ejection seats

On board Oxygen Generating System

High-strength aluminium structure for durability

Stepped tandem seating for increased instructor visibility

Environmental Control System to keep cockpit cool or warm

Capability to carry underwing fuel tanks

FACTS AND FIGURES

GROUND-BASED TRAINING

MANAGEMENT

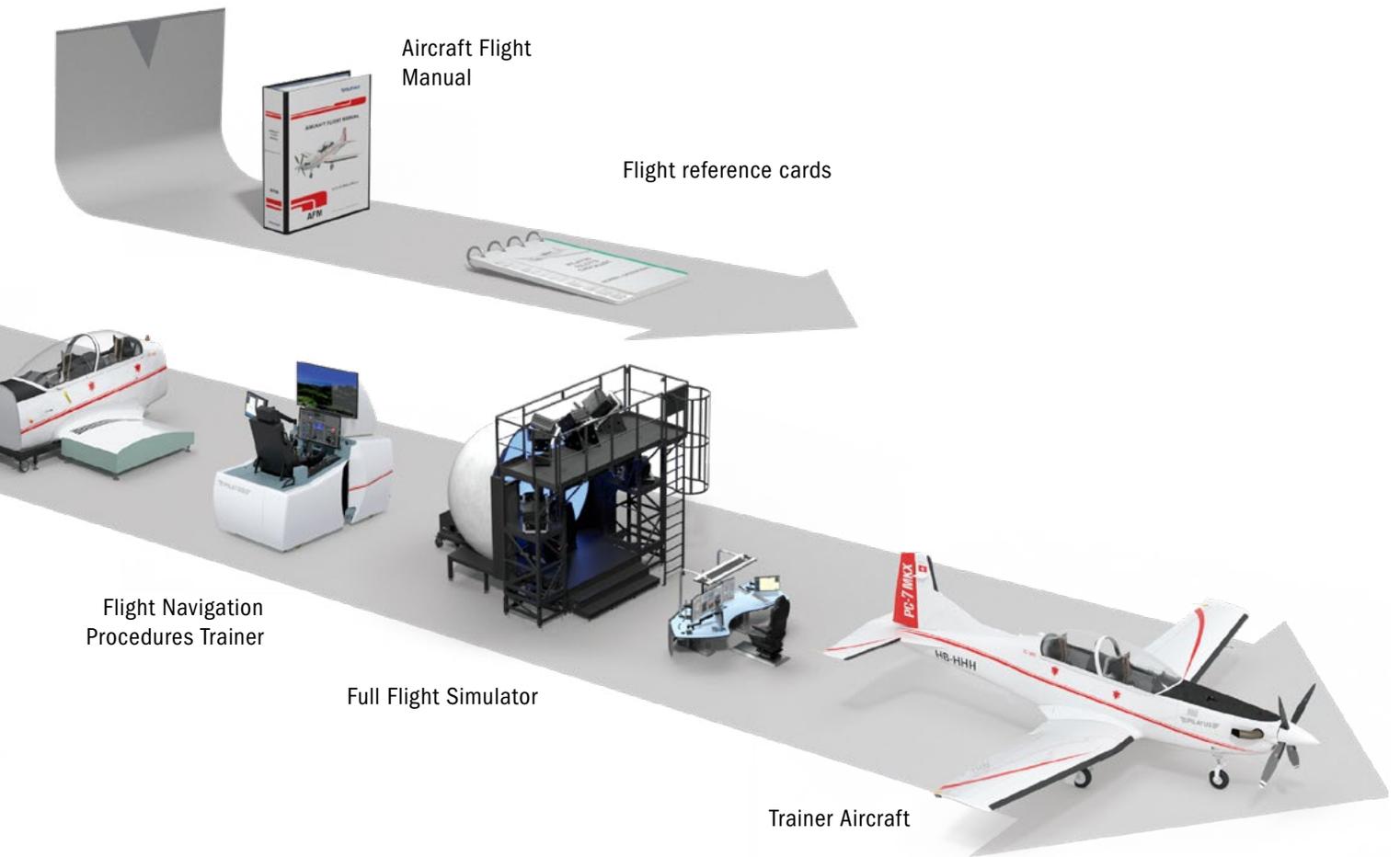
Training Management System

PRACTICAL

THEORETICAL



DOCUMENTATION



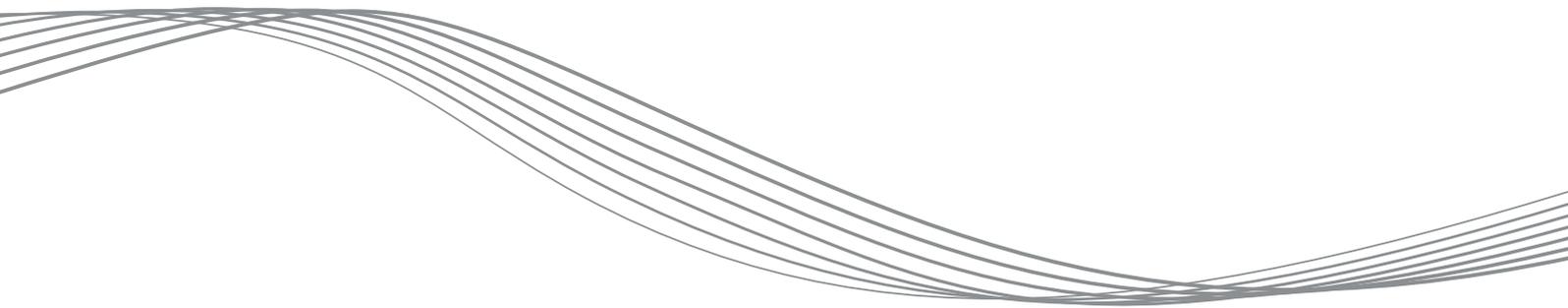
CONTACT US

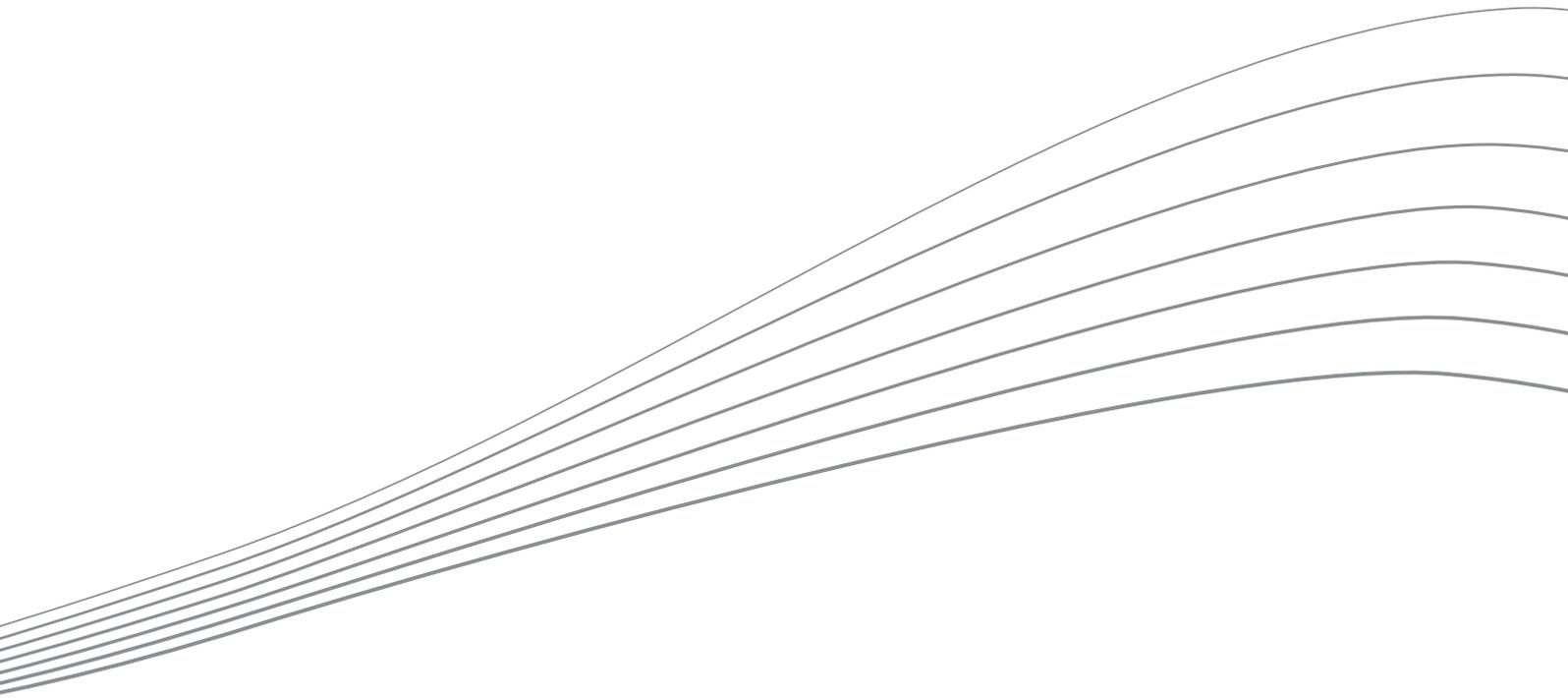
FLY THE SMART BASIC TRAINER

PLEASE CONTACT US FOR
MORE INFORMATION.

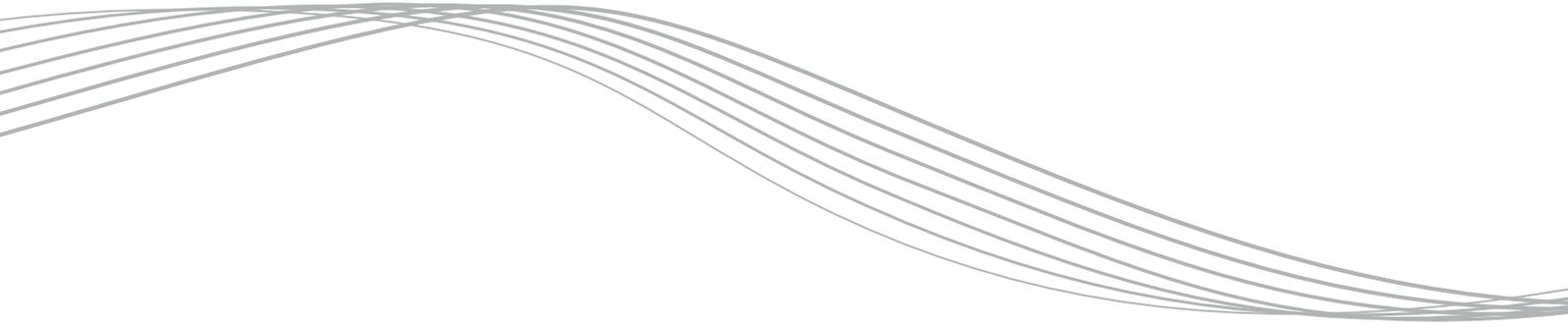
pc-7mkx@pilatus-aircraft.com

www.pilatus-aircraft.com/pc-7





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 PC-12, the best-selling single-engine turboprop in its class and the PC-21, the training system of the future. The latest aircraft 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 130 apprentices in 13 different professions – job training for young people has always been a very high priority at Pilatus.



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