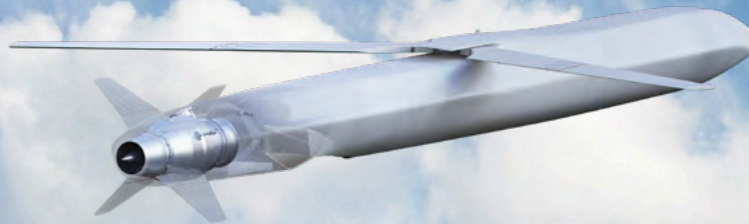
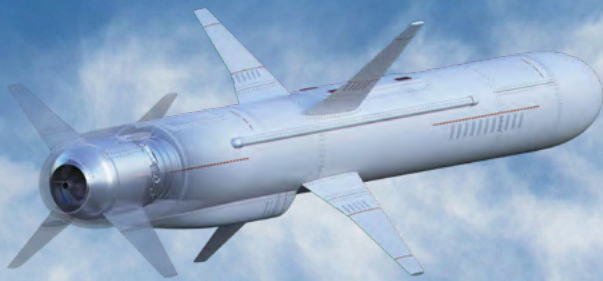


PBS AEROSPACE MAGAZINE



 **PBS AEROSPACE**

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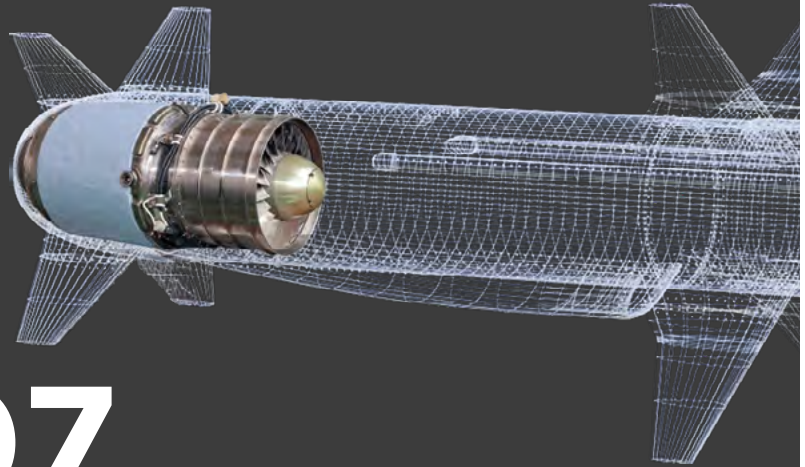
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Tomas Koutsky
Director of PBS Aerospace

Welcome to the PBS Aerospace Magazine

I'm proud to present PBS Aerospace Annual Magazine - a window into our innovations and contributions to the defense industry. As you all certainly know, PBS Aerospace specializes and is a global leader in design, development and production of small gas turbine engines used for drones, cruise missiles, and various unmanned aerial systems (UAS).

The defense industry today is navigating a rapidly shifting global landscape, characterized by increased geopolitical tensions, emerging technological threats. In response to that the nations seek to bolster their security in an increasingly unpredictable world. Defense budgets are rising, particularly in areas like advanced missile systems, cyber defense, and artificial intelligence-driven technologies.

There are also several key trends that resonate across unmanned defense industry and determine our current efforts: increasing

production capabilities to deliver advanced turbine engines at scale, implementing lean manufacturing techniques that ensure high performance at a lower cost and providing our partners with the cutting-edge technology at a price point that meets today's defense budgets.

The importance of unmanned systems in military strategy grows dramatically and PBS Aerospace remains committed to meeting the demand for reliable, high-performance propulsion systems that support a wide range of defense applications. We focus on making our products more accessible and adaptable to the evolving needs of global security, also through expanding our global full-scale presence.

Thank you for being a part of the PBS Aerospace journey!

ABOUT US



PBS GROUP is a fast-growing network of development, manufacturing and sales companies that provide turnkey solutions to clients around the world. With more than 200 years of engineering and technology experience, we specialize in delivering high-quality, innovative products and services tailored to the unique needs of industries ranging from aerospace to cryogenics. Our role in the global marketplace is defined by our commitment to precision, reliability and leading-edge technology. We partner with leading organizations and manufacturers around the world to offer advanced solutions.

55

Years in Aerospace
Years in Investment
Casting

65+

Mil. EUR in Revenues

700

Permanent
Employees

40

Years in Cryogenics

5+

Mil. EUR Invested in
R&D

100+

Experienced
Engineers



PBS AEROSPACE has been active in the aerospace industry for over 55 years.

Turbojet, turboprop, and turboshaft engines designed and produced by PBS ensure exceptional performance for small manned and unmanned aircraft systems. The reliability of our engines is proven by more than 1,500 successful installations in UAVs, aerial targets, microjets, and light helicopters.

PBS Auxiliary Power Units (APUs) are tailored to customer needs to provide bleed air, electric and

hydraulic power. Environmental Control Systems (ECS) maintains stable cabin air pressure, temperature, and humidity for the comfort and safety of the crew and passengers.

Parts and components used for our products are manufactured within our capacities. PBS is also a proven supplier of these articles to leading aircraft producers.

Customers highly appreciate PBS development flexibility, extended testing and product modification capabilities.

COMPANY PROFILE

55 years in Aerospace

Well-established manufacturer

In-house research & development facility and team

An OEM with complete range of in-house capabilities

US PRESENCE

Over 10 years in the US market

Office located in Atlanta, GA

Local team of experienced professionals

US DoD qualified

MAJOR CERTIFICATES

EASA - DOA, MOA, POA: Approval to design, manufacture and maintain turbine machines and equipment

Certificates from the **Ministry of Defence** for manufacturing and maintaining the military aerospace products

NADCAP for non-destructive testing and chemical processes

AS 9100, ISO 9001, ISO 14001

CORPORATE MEMBERSHIPS



Air Force Association



Army Aviation Association

History | Product milestones



2024

We will be showcasing the latest AI-PBS-350 engine at Farnborough International.



2023

The PBS APU SPARK40 was officially launched by PBS during the Paris Air Show 2023 on Tuesday, June 20th.



2022

The development of the CTE 300 cryogenic turboexpander for use in the hydrogen industry has begun.



2021

Commencement of the development of the PBS TJ200 turbojet engine



2020

Commencement of the serial production of cryogenic turboexpander HEXT/CTE 200



2018

Commencement of the serial production of jet engine PBS TJ80-90, first model of the new PBS TJ80 engine range



2015

Flight tests of TS100 turboshaft engine on T-250 helicopter



2013

First flight of VUT061 Turbo with TP100 turboprop engine



2012

PBS Velka Bites was awarded the title „Company of the Year“



2003

Commencement of the serial production of jet engine TJ100



1985

Commencement of the production of decanter centrifuges



1973

Commencement of the development of generators and auxiliary power units



1969

Establishment of a precision casting foundry in PBS Velka Bites



1950

Founding of PBS in Velka Bites, construction of the first production halls



1945

Bombing and destruction of a large part of the First Brno plant in Brno



1929

Creation of the PBS brand




1903

First steam turbine manufactured under the Parsons license




1837

Relocation of the machine works to Brno on Olomouc Street and commencement of production



1824

The first Luz steam engine in operation, and the granting of privileges for the construction of steam engines and boilers



1814

Establishment of the machine works in Slapanice, the foundation of Prvni brnenska strojirna by Jan Reiff

AI-PBS-350



Following the Memorandum of Understanding signed at the Paris Air Show 2023, PBS and Ivchenko-Progress SE have successfully launched the AI-PBS-350 turbojet engine in 2024. This advanced engine, developed through our strategic partnership, delivers an impressive 3,400 N of thrust. The AI-PBS-350 is designed for a wide range of UAV and UCAV applications, offering superior performance. This launch marks a significant milestone in our collaboration with Ivchenko-Progress SE and highlights our ongoing efforts to advance aerospace technology.

PBS APU SPARK40



At the Paris Air Show 2023, PBS proudly introduced the new PBS APU SPARK40 auxiliary power unit. This innovative APU doubles the AC power available for onboard systems while also providing increased amounts of compressed air. Additionally, the PBS APU SPARK40 is lighter, features an expanded operating envelope and has an optimized fuel-oil system. The unit also offers improved reliability and an extended lifespan for the combustion chamber.

SEGMENT



We are expanding our product portfolio of precision castings to include gas turbine segments. In addition to offering gas turbine blades, we will now provide comprehensive supplies for gas turbine overhauls. This expansion enables us to deliver more complete solutions and better support our customers' maintenance needs.

PRECISION ENGINEERING AT ITS BEST

PBS Aerospace's core business is aerospace engineering: in-house development, production, testing, and certification of small turbine engines, auxiliary power units, and environmental control systems.

AIRCRAFT ENGINES

PBS designs and produces a range of turbojet, turboprop, and turboshaft engines known for their high-performance capabilities in both manned and unmanned aircraft systems. Different versions of these engines are tailored specifically for defence applications, including missile systems. Our reliability is demonstrated by widespread use across UAVs, airborne targets, microjets, and light helicopters.



Turbojet Engine PBS TJ150

APU - AUXILIARY POWER UNITS

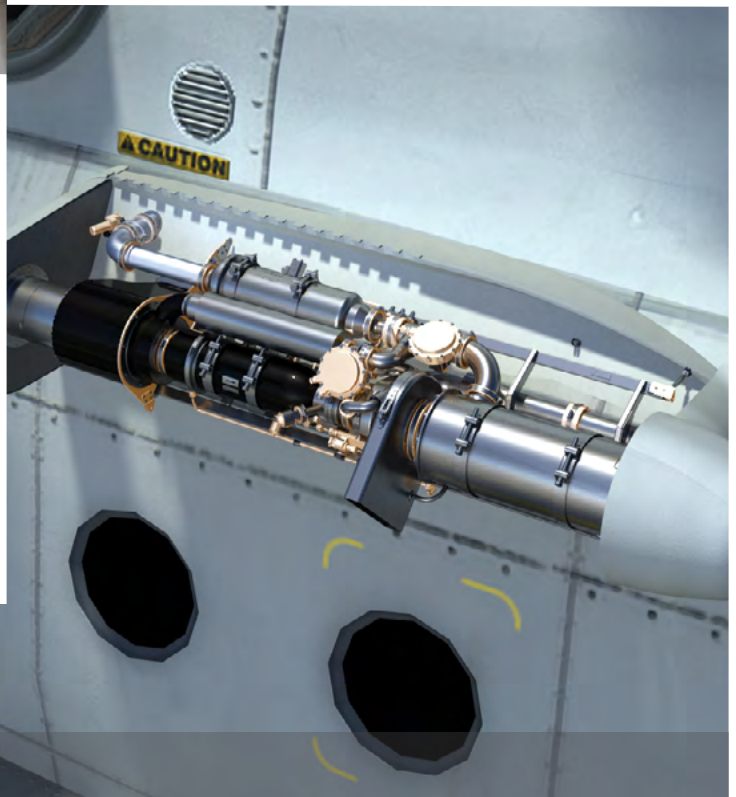
As a certified manufacturer of APUs under EASA regulations, PBS specializes in tailoring our products to meet customer-specific requirements. PBS APUs are widely integrated into medium helicopters and training aircraft worldwide due to their proven reliability and performance.



PBS APU SPARK40


ECS - ENVIRONMENTAL CONTROL SYSTEMS

Our ECS solutions are designed to meet specific customer requirements effectively. With a substantial number of PBS ECS units produced and installed to date, they are predominantly utilized in medium helicopters and training aircraft, while also being adaptable for use in light transport aircraft and business jets.



Example of ECS Installation

INVESTMENT CASTING



We are proud to introduce ourselves as one of the most modern precision casting foundries in Central Europe with a rich history dating back to 1969. Our goal is to gain visibility on the international stage and offer a wide range of precision casting services for the aerospace, power engineering, construction, and other industrial sectors. Our foundry is equipped with the most modern equipment for all stages of the precision casting process, from metal melting to the final product. This allows us to produce high-quality castings from a wide range of materials like nickel and cobalt superalloys. We offer comprehensive services from design casting, simulation of solidification, reverse engineering and after casting also machining to the final product. Our castings are characterized by their high durability and meet even the most demanding customer requirements.

Our highest specialization is the production of **impellers for turbocharger and aircraft engine, further blades for gas turbines, spinner discs for glass wool production, and femoral components**. Thanks to our innovative technologies and experience, besides these segments, we are a reliable partner also for major suppliers to many other industrial areas.

We are flexible and can adapt to the individual needs of our customers. We are also aware that by meeting deadlines and ensuring the requested quality requirements, thus building long-term and reliable partnerships with our customers. We believe that our advanced technologies, wide range of materials, high-quality services, and extensive experience make us the ideal partner for your precision casting projects. We look forward to working with you and helping you achieve your goals.

VACUUM FURNACE

We are expanding our precision casting technology. Currently, we are acquiring a new vacuum furnace and a new annealing furnace. These investments will enhance our capacity and technological capabilities in precision casting.



Casting of Turbine Wheel

SURFACE TREATMENTS

Our electroplating plant has been providing its services to internal and external customers for more than forty years. We offer anodizing, blackening, zinc plating, tin plating, nickel plating and other surface treatments in top quality and with a responsible professional approach to every job.



Blackening

CRYOGENICS

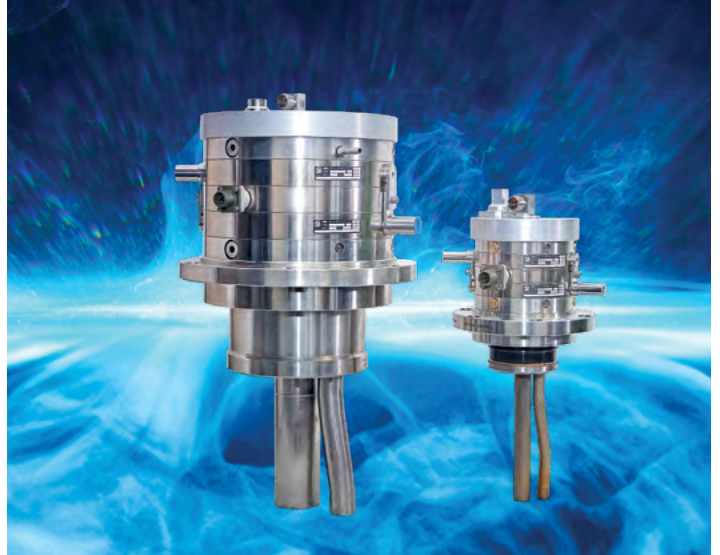
Since the late 1980s, we have specialized in designing and supplying cryogenic turbines for the liquefaction of inert gases, such as helium. Today, we are a key provider of turboexpanders, compressors, and pumps to top global manufacturers of cryogenic systems.



Turboexpander

TURBOEXPANDERS

Our turboexpanders enhance efficiency by recovering energy in industrial processes. These devices are vital in liquefaction of inert gases and reducing operational costs. Our advanced designs, including eddy current brakes, ensure exceptional performance and reliability to meet modern industry demands.



GLOBAL AEROSPACE INNOVATION

"INSPIRING SUCCESS STORIES"



CZECH CONSORTIUM AND LOCKHEED MARTIN LAUNCH COLLABORATIVE DEVELOPMENT PROJECT

F-35 Lightning II

A consortium of companies PBS, ONE3D, the HiLASE Centre of the Institute of Physics of the Academy of Sciences, and American Lockheed Martin launch a development collaboration

The consortium, composed of three companies – the hi-tech aerospace manufacturer PBS Group, the leader in additive manufacturing ONE3D, and the leading research Centre HiLASE of the Institute of Physics of the Academy of Sciences – today ceremonially signed a collaboration agreement with the leading American company in the aerospace and defense industry, Lockheed Martin.



The subject of the four-party agreement is cooperation on the development and qualification of an alternative manufacturing process for the F-35 aircraft's integrated power package exhaust screen. The goal is to join the F-35 supply chain, which is composed of global companies supporting the program.

Only the most technologically advanced companies that must undergo a complex certification process can succeed in contributing to the program. The PBS-ONE3D-HiLASE consortium aims to achieve qualification by 2029 with the potential to become part of Lockheed Martin's supply chain. The project will utilize the latest technologies such as additive manufacturing, laser surface enhancement and advanced heat treatment in a vacuum furnace. The result will be an innovative production of a special component that is part of the F-35 aircraft.



Members of the Consortium and Lockheed Martin

(from left: David Baker, Lockheed Martin; Pavel Čechal, PBS GROUP; Michal Prouza, HiLASE and Tomáš Dokoupil, ONE3D)

Success story | Our production all over the world

AERO

AERO Vodochody AEROSPACE a.s. is the largest aircraft manufacturer in the Czech Republic. It is one of the oldest aircraft manufacturers in the world.

As early as 1969, the turbostarters for the AI-25W jet engines of the L-39 Albatros trainer aircraft were the first PBS products for the aerospace production programme. In the following years, they were replaced by the production of the Safir 5 air generator, the predecessor of today's Safir 5K/G APU, which is still one of the key products of the Aircraft Division. In 1972, we also delivered the first 11 of the 4,500 sets of environmental control systems for the L-39.

50+ years of successful cooperation

The L-39 Albatros gained worldwide popularity mainly due to its flight characteristics, ease of control, and high reliability. Almost 2,900 of these aircraft were built between 1971 and 1997.



We believe that the very successful cooperation between PBS and Aero Vodochody, which has lasted for over 50 years, will continue and that new or upgraded aircraft with PBS equipment and components will continue to win accolades and demonstrate the high level of the Czech aviation industry all over the world.



CURTI AEROSPACE ZEFHIR

The PBS TS100 turboshaft engine has been selected by Curti Aerospace, an Italian manufacturer, to power their Zefhir light helicopter. Designed to meet the demands of both recreational and training flights, the Curti Zefhir integrates our turboshaft engine, equipped with FADEC control

to deliver a derated power output of 141 shp (105 kW). This partnership highlights our dedication to providing advanced propulsion solutions that optimize performance and reliability for modern aircraft applications.

HYDRA DRONES

Combining the high specific thrust of PBS jet engines, with the quick response times of BLDC motors, the British company created an immensely powerful and maneuverable UAV. Being a VTOL, it does not require a runway to operate and can take off and land on virtually any flat surface. Due to the Extremely high energy density of jet fuel (12 kWh/kg) compared to batteries (<200 Wh/kg), Hydra is

able to pack huge amounts of power into a small, lightweight form factor.

The advanced AI-powered sensor suite enables Hydra to operate GPS-denied environments. Using a long line and cargo net made of Kevlar, Hydra can carry up to 140 kg in a standard NATO half pallet.

LEONARDO MIRACH 100/5

We proudly collaborate with Leonardo in enhancing the Mirach 100/5 training target. This training drone has been a cornerstone of Leonardo's portfolio for decades, widely adopted by international navies and air forces. Sixteen armed forces, including Belgium, Denmark, France, Germany, Greece, Italy, Spain, and the United Kingdom, have utilized the Mirach 100/5 for their training needs.

The upgraded Mirach 100/5 V2 represents the evolution of this successful platform, featuring mid-life enhancements such as the integration of the PBS TJ150 engine, advanced avionics, and enhanced reliability. It accurately simulates enemy aircraft and incoming missiles in training scenarios, providing realistic radar and weapon system training opportunities for armed forces.



Launch of the Mirach 100/5 Aerial Target

Success story | Our production all over the world

SONEX AIRCRAFT SUBSONEX

The exceptional power-to-weight ratio of up to 1,250 N (292 lbf) combined with low fuel consumption in its thrust category, along with high reliability and advanced technical capabilities, led Sonex Aircraft to select the PBS TJ100 engine for their SubSonex Personal Jet. Introduced at AirVenture 2009, the SubSonex JSX-1 prototype successfully completed its maiden flight in August 2011 after being outfitted with the PBS TJ100 engine. A rigorous flight test program was completed in 2012, establishing its reliability. Today, numerous SubSonex aircraft are operational across the United States.



INSTITUTO NACIONAL DE TÉCNICA AEROSPAACIAL: THE FIRST CUSTOMER

The first customer for the PBS TJ100 engine was INTA, the Spanish manufacturer of aerial target drones. Thanks to the continuous innovation process and more than 20 ongoing customer modifications, our jet engines have gradually gained customers in more than twenty countries. The degree of customization is a major advantage of PBS engines.

NAVMAR TRACER UAV



Navmar Applied Sciences Corporation (NASC) continues with the project of a multirole UAV. The NASC TRACER™ unmanned aircraft is a low-cost, high-performance UAV designed for speed, versatility, and survivability.

With a wingspan of 18' and a gross take-off weight of less than 1,500 lbs., it provides the end users with capabilities in a relatively small footprint that are traditionally found in much larger and more expensive UAS.

ACC GROUP AB FIGHTING FIRES TOGETHER

This heavy-lift drone can carry the heaviest payloads in its category. Featuring a modular design and powered by a turbine engine, it utilizes a patented propulsion system that ensures mechanical rotor drive. Primarily, this drone is used for firefighting.



The Swedish company ACC Group AB, based in Åtvidaberg, Sweden, has been manufacturing autonomous and remotely controlled drones for many years. PBS proudly joined their Thunder Wasp large drone project.

Currently, ACC is working on two development configurations: one designed for fire-

fighting with a standard Bambi bucket, and another equipped with a special container tank that enables the drone to collect water while hovering close to the water surface.

Cutting-Edge Firefighting Capabilities

The engineers at ACC Group AB have elevated firefighting capabilities to new heights by selecting the PBS TS100 turboshaft engine for their innovative Thunder Wasp drone. This powerful engine is the perfect fit for the challenging tasks this drone is designed to tackle. Its compact size supports a sleek and agile design, crucial for maneuvering through tight spaces and navigating obstacles in fire zones.

Unmatched Power

Despite its compact size, the TS100 packs a serious punch, delivering an impressive 180 kW of continuous power. This ensures the Thunder Wasp can maintain its effectiveness even in high-altitude operations. This robust engine is designed to handle the toughest firefighting missions, providing the necessary power and reliability to tackle extreme conditions. Its performance is uncompromised by harsh environments, making it an ideal choice for the demanding nature of aerial firefighting.

A new twin-engine version of the Thunder Wasp is currently in development, which will significantly increase its payload capacity. The current model already boasts an impressive payload capacity of 400 kg, but the upcoming twin-engine variant aims to nearly double that capacity to almost 1,000 kg. This enhancement will further solidify the Thunder Wasp's position

PBS TURBINE ENGINES PORTFOLIO



PBS TJ40-G1



PBS TJ40-G2



PBS TJ40-G1NS



| PARAMETERS | PBS TJ40-G1 | | PBS TJ40-G2 | | PBS TJ40-G1NS | |
|---------------------------|--------------|-----------------|--------------|-----------------|---------------|-----------------|
| Thrust | 395 - 425 N | 89 - 96 lbf | 395 - 425 N | 89 - 96 lbf | 395 - 425 N | 89 - 96 lbf |
| Power supply | 14 V DC | 14 V DC | 28 V DC | 28 V DC | 14 V DC | 14 V DC |
| El. power output | 150 W | 150 W | 1,100 W | 1,100 W | 150 W | 150 W |
| SFC | 0.147 kg/N/h | 1.442 lb/lbf/hr | 0.147 kg/N/h | 1.442 lb/lbf/hr | 0.147 kg/N/h | 1.442 lb/lbf/hr |
| TBO | 50 hrs | 50 hrs | 50 hrs | 50 hrs | 50 hrs | 50 hrs |
| DIMENSIONS | | | | | | |
| Outer diameter | 147 mm | 5.79 in | 147 mm | 5.79 in | 147 mm | 5.79 in |
| Length | 304 mm | 11.97 in | 373 mm | 14.69 in | 304 mm | 11.97 in |
| Weight | 3.40 kg | 7.50 lb | 3.80 kg | 8.38 lb | 3.60 kg | 7.94 lb |
| OPERATING ENVELOPE | | | | | | |
| Max. altitude | 9,000 m | 29,528 ft | 9,000 m | 29,528 ft | 9,000 m | 29,528 ft |
| Max. speed | 0.8 M | 0.8 M | 0.8 M | 0.8 M | 0.8 M | 0.8 M |
| Ambient temperature | -50/+50 °C | -58/+122 °F | -50/+50 °C | -58/+122 °F | -50/+50 °C | -58/+122 °F |
| STARTING ENVELOPE | | | | | | |
| Max. altitude | 4,500 m | 14,764 ft | 4,500 m | 14,764 ft | 4,500 m | 14,764 ft |
| Max. speed | 0.35 M | 0.35 M | 0.35 M | 0.35 M | 0.15 M | 0.15 M |
| Ambient temperature | -40/+50 °C | -40/+122 °F | -40/+50 °C | -40/+122 °F | -30/+50 °C | -22/+122 °F |

PBS TJ80-90



| PARAMETERS | METRIC | IMPERIAL |
|------------------|--------------|-----------------|
| Thrust | 900 N | 202 lbf |
| Power supply | 28 V DC | 28 V DC |
| El. power output | 650 W | 650 W |
| SFC | 0.125 kg/N/h | 1.226 lb/lbf/hr |
| TBO | 25 - 50 hrs | 25 - 50 hrs |

| DIMENSIONS | METRIC | IMPERIAL |
|----------------|----------|----------|
| Outer diameter | 235 mm | 9.25 in |
| Length | 636 mm | 25.04 in |
| Weight | 12.80 kg | 28.22 lb |

| OPERATING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 10,000 m | 32,808 ft |
| Max. speed | 0.9 M | 0.9 M |
| Ambient temperature | -50/+45 °C | -58/+113 °F |

| STARTING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 6,000 m | 19,685 ft |
| Max. speed | 0.6 M | 0.6 M |
| Ambient temperature | -35/+45 °C | -31/+113 °F |

PBS TJ80-120



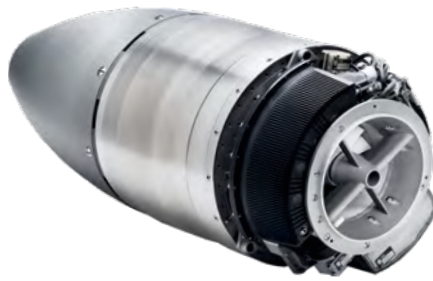
| PARAMETERS | METRIC | IMPERIAL |
|------------------|--------------|-----------------|
| Thrust | 1,200 N | 269 lbf |
| Power supply | 28 V DC | 28 V DC |
| El. power output | 2,250 W | 2,250 W |
| SFC | 0.125 kg/N/h | 1.226 lb/lbf/hr |
| TBO | 25 - 50 hrs | 25 - 50 hrs |

| DIMENSIONS | METRIC | IMPERIAL |
|----------------|----------|----------|
| Outer diameter | 235 mm | 9.25 in |
| Length | 636 mm | 25.04 in |
| Weight | 12.80 kg | 28.22 lb |

| OPERATING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 10,000 m | 32,808 ft |
| Max. speed | 0.9 M | 0.9 M |
| Ambient temperature | -50/+45 °C | -58/+113 °F |

| STARTING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 6,000 m | 19,685 ft |
| Max. speed | 0.6 M | 0.6 M |
| Ambient temperature | -35/+45 °C | -31/+113 °F |

PBS TJ100



| PARAMETERS | METRIC | IMPERIAL |
|------------------|-----------------|-----------------|
| Thrust | 1,100 - 1,250 N | 247 - 281 lbf |
| Power supply | 28 V DC | 28 V DC |
| El. power output | 700 - 2,300 W | 700 - 2,300 W |
| SFC | 0.126 kg/N/h | 1.236 lb/lbf/hr |
| TBO | 25 - 300 hrs | 25 - 300 hrs |

| DIMENSIONS | METRIC | IMPERIAL |
|----------------|----------|----------|
| Outer diameter | 272 mm | 10.71 in |
| Length | 636 mm | 25.04 in |
| Weight | 17.60 kg | 38.80 lb |

| OPERATING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 10,000 m | 32,808 ft |
| Max. speed | 0.9 M | 0.9 M |
| Ambient temperature | -50/+45 °C | -58/+113 °F |

| STARTING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 6,000 m | 19,685 ft |
| Max. speed | 0.6 M | 0.6 M |
| Ambient temperature | -35/+45 °C | -31/+113 °F |

PBS TJ150



| PARAMETERS | METRIC | IMPERIAL |
|------------------|---------------|-----------------|
| Thrust | 1,500 N | 337 lbf |
| Power supply | 28 V DC | 28 V DC |
| El. power output | 600 - 2,250 W | 600 - 2,250 W |
| SFC | 0.12 kg/N/h | 1.138 lb/lbf/hr |
| TBO | 25 - 50 hrs | 25 - 50 hrs |

| DIMENSIONS | METRIC | IMPERIAL |
|----------------|----------|----------|
| Outer diameter | 272 mm | 10.71 in |
| Length | 636 mm | 25.04 in |
| Weight | 17.10 kg | 37.70 lb |

| OPERATING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 10,000 m | 32,808 ft |
| Max. speed | 0.9 M | 0.9 M |
| Ambient temperature | -50/+45 °C | -58/+113 °F |

| STARTING ENVELOPE | METRIC | IMPERIAL |
|---------------------|------------|-------------|
| Max. altitude | 6,000 m | 19,685 lbf |
| Max. speed | 0.6 M | 0.6 M |
| Ambient temperature | -35/+45 °C | -31/+113 °F |

PBS TJ200



| TECHNICAL PARAMETERS | METRIC | IMPERIAL |
|-------------------------|---------|------------|
| Thrust | 2,280 N | 512.54 lbf |
| Power supply | 28 V DC | 28 V DC |
| Electrical power output | 4.0 kW | 4.0 kW |

| DIMENSIONS AND WEIGHT | METRIC | IMPERIAL |
|-----------------------------------|---------|----------|
| Outer diameter* | 246 mm | 9.68 in |
| Length (including exhaust nozzle) | 730 mm | 28.74 in |
| Weight | 28.0 kg | 61.73 lb |

*Excluding insulation and equipment

| OPERATING ENVELOPE | METRIC | IMPERIAL |
|--------------------|----------|-----------|
| Max. altitude | 10,000 m | 32,808 ft |
| Max. speed | 0.95 M | 0.95 M |

| STARTING ENVELOPE | METRIC | IMPERIAL |
|-------------------|--------------|--------------|
| Max. altitude | 6,000 m | 19,685 ft |
| Max. speed | 0.4 to 0.8 M | 0.4 to 0.8 M |

AI-PBS-350



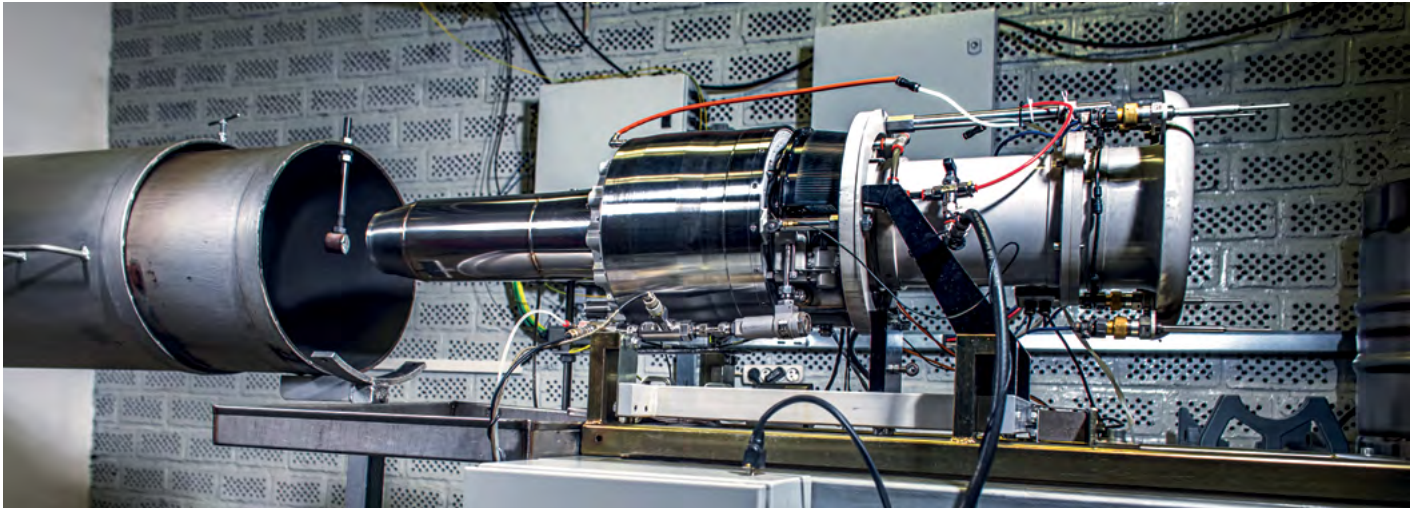
| TECHNICAL PARAMETERS | METRIC | IMPERIAL |
|---------------------------|--------------|----------------|
| Thrust | 3,400 N | 764.35 lbf |
| Specific fuel consumption | 0.125 kg/N/h | 1.226 lb/lbf/h |
| Electrical power output | 5.0 kW | 5.0 kW |

| DIMENSIONS AND WEIGHT | METRIC | IMPERIAL |
|-----------------------|---------|-----------|
| Length | 706 mm | 27.79 in |
| Outer diameter | 298 mm | 11.73 in |
| Weight | 51.0 kg | 112.43 lb |

PBS TEST FACILITY

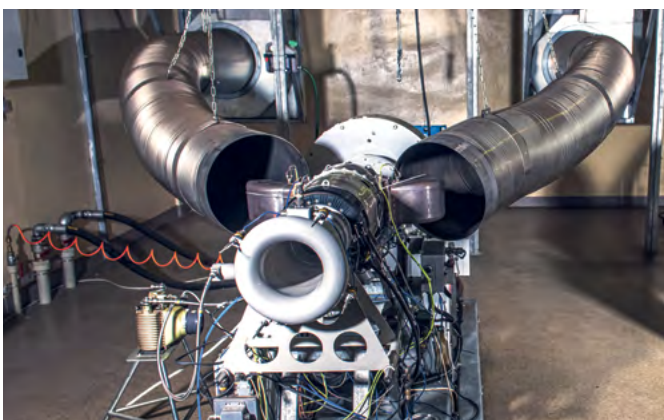
The development and production of UAV turbine engines at PBS is also supported by our own extensive in-house testing facility. More than 50 experienced flight test engineers and

technicians have a total of 16 specialized testing cells at their disposal for comprehensive testing of turbine engines as well as auxiliary power units and environmental control systems.



TEST CAPABILITIES

- › Turbojet engines with a thrust of up to 2,500 N
- › Flight speed simulations of up to 0.8 M
- › Testing with an air pressure of up to 1,200 kPa
- › Temperatures from -60 to 80 °C
- › G-force limit tests
- › Vibration and impact tests
- › Complete ATP and production testing





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