

#### **PBS PRESS RELEASE**

#### January 14, 2021

# Prvni brnenska strojirna Velka Bites (PBS), an EASA certificated manufacturer, expands a product line of turbojet engines. PBS, the company with an over fifty-year history in the aerospace industry, will unveil new fuel lubricated turbojet engine PBS TJ100P at fair IDEX 2021 Abu Dhabi.

The PBS TJ100P engine has been purpose-designed for unmanned disposal applications, target drones, and other air-launched and ground-launched UAVs. PBS TJ100P is the modification of the successful PBS TJ100, that has worldwide sold more than thousands of units.

The customers will appreciate that the fuel lubricated engine without a separated oil system has no tilt angle limits during start and flight operation. The engine has capability of air-launched accelerated start within 8 seconds.

The electrical power output up to 2.3 kW fulfills the growing requirements of the current market. Due to a reduced weight of 17.2 kg and thrust of 1,250 N, the PBS TJ100P turbojet engine achieves an excellent thrust-to-weight ratio in its thrust category.

The engine can be adjusted for saltwater landing recovery. Other modifications are the customized design of fixing points or extended exhaust nozzle.

"We try to adapt to market demand as much as possible, both in developing entirely new products and modifications of the current ones." States Mr. Milan Macholan, the CEO of PBS.



Target drone with turbojet engine PBS TJ100P



**Turbojet engine PBS TJ100P** 

### Main technical parameters of the PBS TJ100P engine

Turbojet engine PBS TJ100P	
Maximum thrust	1,250 N
Maximum speed	0.8 M
External diameter of the engine	272 mm
Engine weight	17.2 kg
Maximum altitude for air-launched start	6,000 m
Maximum operating altitude	10,000 m
Electrical power output	750-2,300 W
Min. / max. ambient temperature	-35/+45 °C
Fuel	JET-A1

### Why PBS?

- 50 years of experience in aerospace industry
- More than 14,000 supplied aerospace turbine units
- EASA certification and DOA, POA, MOA approvals certifications



# **PBS Product segments**

- Aerospace (turbojet engines, auxiliary power units, environmental control units)
- Cryogenics (turboexpanders, pumps and compressors for liquefaction of inert gases)
- Power engineering (power generating units, turbines, industrial boilers)
- Investment casting (nickel-based, cobalt-based superalloys castings)
- Service and maintenance (APUs)

## Contact

Prvni brnenska strojirna Velka Bites, a. s. Vlkovska 279, 595 01 Velka Bites, Czech republic, EU <u>sales@pbs.cz</u> www.pbs.cz