UAV Turbines, Inc. Launches a Compact Turbogenerator Redefining Portable Power Use

The turbogenerator platform brings a new class of micro gas-turbine generators to the market.

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UAV Turbines announced the launch of its lightweight, military-grade microturbine generator platform for on-demand electrical power ranging from 3kW to 40kW. (Photo: Business Wire)

MIAMI--(<u>BUSINESS WIRE</u>)--<u>UAV Turbines, Inc.</u> (UAVT), a pioneer of microturbine technology, today announced the launch of its lightweight, military-grade microturbine generator platform for on-demand electrical power ranging from 3kW to 40kW. UAVT has extended the use of its micro propulsion technology family, the Monarch 1, by developing a portable Micro-Turbogenerator System (MTS) that fits in a small case that can be carried by two people. Following successful demonstrations, UAVT's MTS 1.0 dynamic ground power system is being developed and tailored alongside potential launch customers to meet specific requirements for their ground power and auxiliary power applications. <u>Watch the MTS 1.0 operating here.</u> "UAVT is applying its groundbreaking gas microturbine design and performance benefits, initially proven for propulsion applications, to help solve global commercial and military portable power source needs," said Kirk Warshaw, CEO of UAV Turbines. "Our 38hp Monarch 5 propulsion engine can be adapted to produce 25kW of power within the requirements of our microturbine generator platform as a portable generator system. The MTS 1.0 fits in a Pelican

type case and runs on safe, non-volatile, easy-to-source heavy fuels, like jet fuel or diesel. It can be used to power any device or system that requires electricity; lights, communication equipment, medical equipment, and it can be used to recharge batteries of all sizes."

UAVT's microturbine generators are more sophisticated than today's conventional generators given that they operate with significantly less vibration and at dramatically lower noise levels due to how high-frequency turbine noise rapidly attenuates with distance. The MTS 1.0 as configured in this video has no noise reduction components. These reduced vibration and noise levels make it easier to integrate into a larger system while simultaneously reducing the wear and tear on structures, operators and total cost of ownership.

The MTS's small size, fuel flexibility, ability to rapidly change configurations and ease of moving without the need for forklifts and flatbed trucks addresses the critically important needs of rescue teams and military units. These teams operate all too often in adverse weather, terrain and hostile environments, independently of large logistic support. There is a significant difference between powering a remote weather station in a cool location at sea level compared to serving as an alternative power unit for air conditioners and communications systems in a parked military vehicle in the blazing desert heat. No single system currently serves all needs optimally. The MTS is the solution to seamlessly adjust to these situational changes, providing users with peak performance and little to no downtime.

Fred Frigerio, UAVT's Senior Vice President of Engineering, added, "Our turbine technology has significant advantages over reciprocating engine-based generators. For starters, they are very compact, quiet, have low vibration, and are extremely reliable. Just as important, they can operate on a variety of heavy fuels and at very different environmental conditions without requiring intrusive modifications."

The microturbine generator platform enables UAVT to test application-specific designs and develop a family of systems that will balance the engineering trade-offs imposed by real-world conditions, such as maximum continuous power needs, target weight, desired footprint, permitted noise, and harsh operating conditions imposed by factors like altitude, temperature, and dust.

To find out more about UAVT's Micro-Turbogenerator System, visit uavturbines.com

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About UAV Turbines, Inc.

UAV Turbines is creating the world's first reliable, lightweight and fuel-efficient microturbine engines to provide propulsion and power generation in small to medium-sized UAVs. The Company's Monarch microturbine increases performance beyond what current engine systems permit. Designed by UAV Turbines' team of world-class engineers and protected by multiple patents, Monarch runs on less-volatile heavy fuels than Avgas and provides abundant onboard electrical power. UAV Turbines' first-of-its-kind engine is a reliable, quiet, cost-effective option for both the defense and commercial sectors. In 2018, the Company entered into a Technical Investment Agreement with the U.S. Military for the development of a more efficient propulsion system, the key advancement to the success of future UAV's. In August 2019, UAVT's Monarch 5 engine powered the successful flight of a 475-pound Group 3 UAV. Privately owned UAV Turbines is headquartered in Miami, Florida. To learn more, visit <u>uavturbines.com</u>.

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