

Locust USA, Inc Signs \$19 million Technology Investment Agreement with the U.S. Army

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Miami, Florida, (February 20, 2018) – Locust USA, Inc, through its wholly-owned subsidiary **UAV Turbines, Inc. (“UAVT”)**, a developer of advanced heavy-fuel microturbine propulsion systems, announced that it has entered into a \$19 million Technology Investment Agreement (“TIA”) with the U.S. Army to collaborate in development of an efficient and reliable/durable small turboprop gas turbine engine for propulsion in the unmanned aerial vehicle (UAV) arena.

The development goals encompass engine capabilities beneficial to both military and commercial markets. This initiative is part of the Army’s “Reliable Advanced Small Power Systems (RASPS) Technology Demonstration” program whose overall objective is to design, manufacture and test a 200 shp class advanced technology engine to technical readiness level (TRL) 6.

“As the demand for UAV missions increases, a reliable heavy-fuel propulsion system that also produces sufficient electrical power is the key to a successful program.” said Dan Mikkelson, UAVT’s Chief Design Engineer. “This effort is a potential solution to providing this vital capability with significant advantages over the presently available systems.”

The fundamental technology for development of the more advanced 200 shp class turbine engine that RASPS will develop over the next 5 years has been demonstrated in UAVT’s UTP50R propulsion system, a 50 hp class turbine engine with a recuperator, high-speed gearbox, variable-pitch propeller, and Full Authority Digital Engine Control (FADEC).

Mikkelson further noted that “the planned advanced technology RASPS engine demonstrator system will increase power to the 200 shp class (with 5 kW or more of electric power) and provide even further advances in performance over the UTP50R in a high reliability, long life engine system. The RASPS program is targeting performance goals that include higher power-to-weight ratio and lower Brake Specific Fuel Consumption (BSFC), using advanced concepts, materials, and system optimization. A special focus will be on technology that greatly improves reliability over conventional engine systems.”

“We’re honored to have been selected to participate with the Army in the effort to create more effective UAV propulsion systems” stated Kirk M. Warshaw, CEO of UAVT. “We share the Army’s recognition that the propulsion system is the key enabling technology for future UAV’s and the foundation on which other technologies will depend.”

“This RASPS development project will demonstrate clear advantages in our technology for military as well as commercial and industrial customers,” commented Fred Frigerio, UAVT’s Senior VP. “It is a unique and very challenging technology to develop, but given our successful 10 hp and 50 hp turbine systems, we are confident that we can meet the Army’s goals. We look forward to collaborating with our counterparts at AMRDEC’s ADD on a regular basis to ensure that we end up with the best possible solution in the shortest time-frame.”

About UAVT

UAVT is a privately owned, Florida based company focused on the research, design, and development of microturbines for use in UAV propulsion systems and portable ground power

applications. Through its parent company Locust USA, founded in 2000, UAVT has been tasked with designing and developing small, quiet, lightweight, fuel efficient turbines that run on heavy fuels.

See: <http://www.uavturbines.com>.

ABOUT AMRDEC

U.S. Army Aviation and Missile Research, Development, and Engineering Center provides increased responsiveness to the nation's Warfighter through aviation and missile capabilities and life cycle engineering solutions.

AMRDEC has the mission to develop technology and engineering solutions for America's Soldiers. AMRDEC employs nearly 10,000 civilian scientists, researchers, and engineers.

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