Revolutionary Advances in Gas Turbine Engines Using Additive Manufacturing

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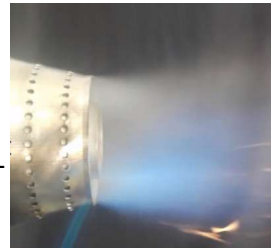
Our Team

•Youngstown State University, The Ohio State University, Proto Precision Additive, GE Aviation, Crane Aerospace, and Quintus Technologies, and AFRL

Description

- A small gas turbine engine that extends the range of Vertical Take-Off & Landing (VTOL) vehicles
- Additive Manufacturing can reduce part count, weight, and produce optimized designs to improve performance of a small gas turbine engine
- How will the technology be used?
  - This technology will be used for recharging batteries and extending the range for VTOL vehicles.
  - This research will also be used to study printing of rotating parts for small attritable engines
- Currently at TRL level 3



Requirement(s) Benefits, Money Saved, Eliminates What?

•The Benefits of our technology are range and power improvements for VTOL vehicles, research that can lead to greater propulsion efficiencies, and reduced down time for attritable engines
•What are we looking for?
•Funding

Airspace Management ☐	Command & Control ☐	Comms ☐	Power & Energy Storage ■	Propulsion ■	Sensors & Awareness ☐	Other ☐