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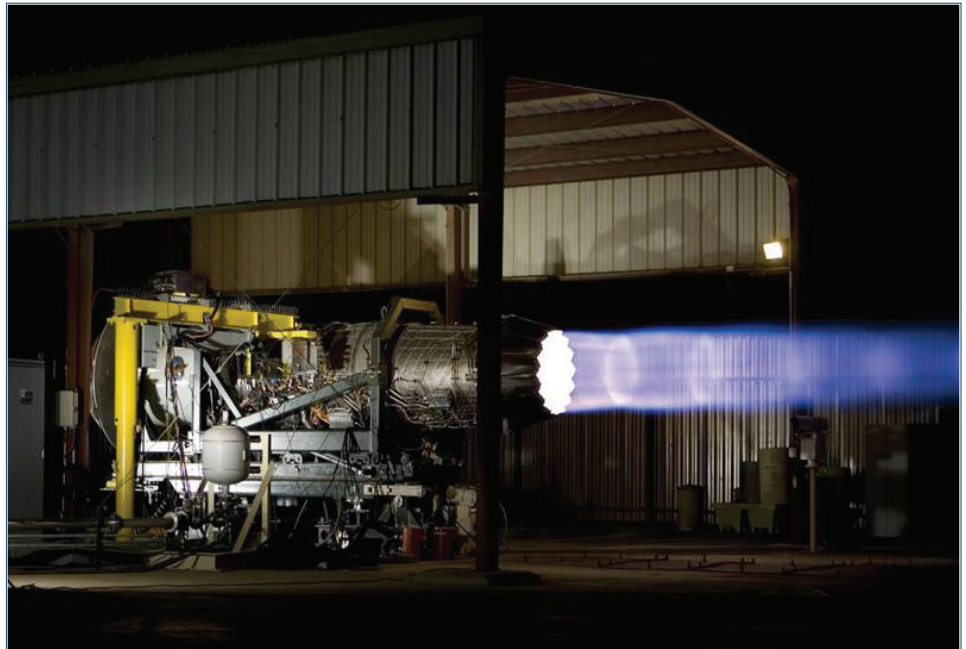
Propulsion, Structures & Manufacturing Enterprise Branch

Who we are

The Propulsion, Structures and Manufacturing Enterprise Branch (RXMS) resides in the Air Force Research Laboratory's (AFRL) Materials and Manufacturing Directorate (RX) Manufacturing and Industrial Technologies Division (RXM).

RXMS's *mission* is to plan and execute manufacturing technology programs and investment strategies to establish and improve production capability for effective processes, materials, and procedures necessary to affordably manufacture and repair Air Force and DoD weapon system engines and structures in response to requirements and activities within the DoD industrial base, Air Force Life Cycle Management and Sustainment Centers, and Research & Development organizations.

The team is the lead program manager for the Manufacturing Science & Technology program on behalf of the Office of the Secretary of Defense's Manufacturing and Industrial Base Policy.



Propulsion engine test stand

Areas of Expertise

- Lean Manufacturing
- Six Sigma
- Manufacturing Readiness Assessments
- Supplier Development
- Composites
- Robotics
- Model Based Enterprise
- Machining
- Metrology
- Metal Casting
- Metal Forming
- Additive Manufacturing

What we do

Technology Programs

Manufacturing of Aerospace Structures

- Reduce the weight and cost of structural components in Air Force systems by implementation of advanced materials and improved manufacturing processes.

Manufacturing of Air Armaments

Manufacturing of Propulsion System

- Advanced Manufacturing Propulsion Initiative (AMPI) focus on performance and affordability of turbine engines.

Manufacturing of Sustainment / Readiness: Depot Maintenance

Branch Teams

Structures Team

- Works in concert with OEMs and component suppliers to develop, demonstrate and transition manufacturing technologies to improve capabilities and performance, and/or decrease manufacturing costs associated with composites, coatings, additive manufacturing, automation, and affordable structures.
- *Key Programs:* Rapid Advanced Non-Contact Measurement System, Affordable Accurate Robot Guidance, and Automated Fastener Installation System

Propulsion Team

- Identifies, develops and manages efforts aimed at improving propulsion system performance and affordability in accordance with the ManTech

Strategic Plan.

- *Key Programs:* Ceramic Matrix Composites, Organic Matrix Composites, Hybrid Bearings, Advanced Castings, Machining, Small Hole Drilling, and Additive Manufacturing

Enterprise Team

- Identifies, develops and manages efforts aimed at improving pervasive industrial base issues. The team develops and incubates the ManTech Strategic Plan.
- *Key Programs:* Advanced Manufacturing Enterprise, Measurement and Replication System (MARs), Helo Brownout Producibility, Digital Thread for MRB, and Actionable Intelligence

Technical Point of Contact

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