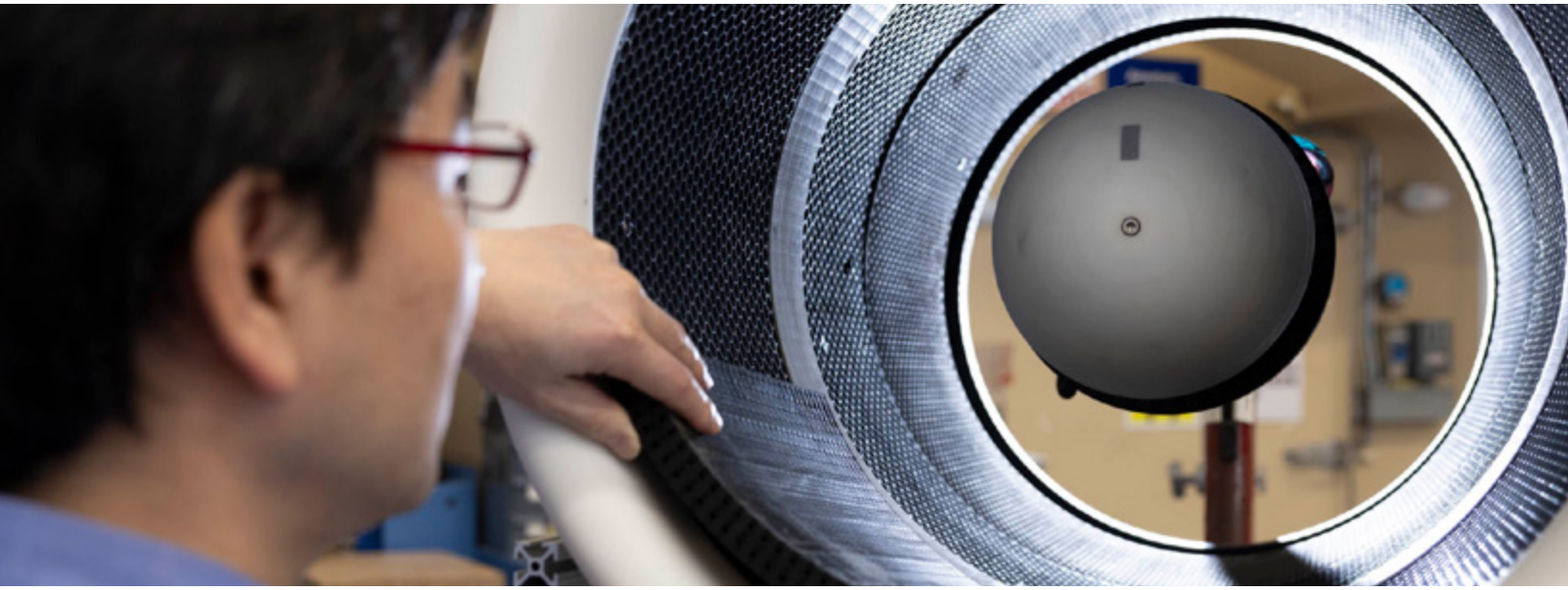


RTX Technology Research Center

Vision. Applied.

As a key innovation hub for RTX, the RTX Technology Research Center (RTRC) takes on the toughest challenges, pushing the limits of technology and science while delivering era-defining innovations in aviation and defense.

For over 95 years, RTRC has operated as a multidisciplinary team of experts, driving groundbreaking advancements. The research center collaborates with RTX businesses, universities, national laboratories, and small businesses to transform cutting-edge research into technologies that connect and protect our world.

95+
year history

330+
employees

200+
U.S. patents are secured every year on average

85%
of our staff hold advanced degrees

69%
hold doctoral degrees

Key capabilities

Aerothermal systems
- Aerodynamics and acoustics
- Combustion and propulsion technology
- Thermofluid sciences

Physical sciences
- Advanced manufacturing
- Chemical sciences
- Materials and mechanics
- Measurement sciences

Intelligent and cyber-physical systems
- Artificial intelligence
- Electric and electromagnetic systems
- Optimization and control technologies

RTX

COLLINS AEROSPACE | PRATT & WHITNEY | RAYTHEON

RTRC
RTX Technology Research Center

Major research areas

The RTRC is primarily focused on six major areas of research that are aligned to RTX's companywide technology strategy and road maps.

Complex integrated systems

Delivering innovative product solutions with advanced system design and engineering tools.

- Rapid and rigorous design exploration
- Design for transient and off-design operations
- System solutions that decrease cost and enhance performance

Advanced materials and manufacturing

Revolutionary materials and fabrication methods for performance-critical applications.

- High-temperature and lightweight structural materials
- Customized, durable coatings
- Additive and convergent manufacturing
- Model-aided design of materials, processes and structures

Model-based digital thread

Connecting data, processes and models across the entire life cycle, with a seamless flow of digital information.

- Model-based, integrated, and collaborative and connected development environments
- Model-based definition, manufacturing and inspection

Artificial intelligence systems

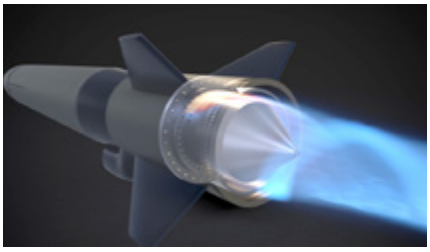
Transformative artificial intelligence (AI) technologies and methods that can enhance safety-critical aerospace and defense operations.

- Foundational models
- Vision-image intelligence
- Embedded AI
- Collaborative autonomy
- Human-machine symbiosis
- AI assurance

Electrification and efficiency

Next-generation systems designed to power advanced mission capabilities.

- Advanced propulsion cycles
- Power generation, distribution, protection and conversion
- Energy storage and alternate fuels



Disruptive technologies

Groundbreaking innovations that feed the pipeline of transformative technologies for RTX.

- Microsystems
- Devices and materials for extreme environments
- Rotating detonation engines
- Sensing and computing using quantum and neuromorphic technologies

Learn more at **rtx.com/rtrc**

Contact

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