

Key Competencies & Expertise

- Active FLOW, Noise and Vibration Control
- Advanced Propulsion & Turbomachinery
- Sensor and Actuator Development
- Advanced Diagnostics
- Aero-Thermodynamics, Aeroacoustics
- High Performance Computation
- Smart Materials, Systems & Structures

Primary Facilities

- Microdiagnostics Laboratory
- Microfluidics and MEMS Labs
- Nanomaterials Labs
- Microfabrication & Rapid Prototyping
- High Temperature Anechoic Jet Facility
 - Subsonic & Supersonic
- Large-scale Anechoic Flow Facility
- STOVL Test Facilities
- Wind Tunnels
 - Subsonic & Supersonic
 - Unsteady/gusting
- Ctr. for Advanced Turbine & Energy

Contact information:

Prof. Farrukh S. Alvi, Director, FCAAP
Department of Mechanical Engineering
Florida A&M University-Florida State University
2525 Pottsdamer Street, Tallahassee, FL 32310
Ph:850.644.0053



FCAAP: Florida Center for Advanced Aero-Propulsion



The Florida Center for Advanced Aero-Propulsion FCAAP

Florida State University (FSU)
In Partnership with
University of Central Florida (UCF)
University of Florida (UF)
Embry-Riddle Aeronautical University (ERAU)



The Florida Center for Advanced Aero-Propulsion (FCAAP) is a technical and academic focal point for the Aerospace Industry that meets the need for the rapidly evolving and highly competitive aerospace industry. FCAAP will help train and sustain the needed, highly skilled workforce to design and produce new products required to help sustain the Aerospace industry. FCAAP is launched with nearly \$15 million seed funds provided by the State of Florida. These funds will be used to maximize and accelerate the growth of existing resources and will create a state and nationwide technology and resource team in the highly competitive and innovation-driven aerospace market. FCAAP dramatically leverages the seed funds and the extensive existing resources (nearly \$70 million) of the FCAAP partners.

Collectively, our resources and state of the art facilities rival those of any such institute or center. Under FCAAP's umbrella are a group of highly experienced, internationally recognized scientists, researchers, and engineers. Our interdisciplinary team covers a broad range of areas related to aeronautics, aerospace, propulsion and space sciences.

FCAAP will be a technical incubator and will facilitate rapid transfer of knowledge and technologies to applications and products through partnerships with aerospace industry, government, and other stakeholders in this area. As a result, FCAAP hopes to play a vital role in the evolution and transition to the next generation of air and spacecraft, aviation and space transport.

- ☐ **Active Flow Control**
- ☐ **Jet & Rocket Noise Control**
- ☐ **Advanced Gas Turbine Technology**
- ☐ **Efficient Engine Inlet Design**
- ☐ **Air & Space Vehicle System Design**

- ☐ **Design of hypersonic Systems**
- ☐ **Alternative Power Systems**
- ☐ **Air Traffic Management**

