

Axient Program Highlight: Air Force Research Lab (AFRL) R&D Integrated Space Experiments (RISE)

Executive Summary

Our R&D Integrated Space Experiments (RISE) contract with the Air Force Research Laboratory Space Vehicles Directorate (AFRL/RV) provides concept design, development, integration, test, launch integration, and operations and evaluation of new space technologies and engineering prototypes. We support a broad range of mission areas including Intelligence Surveillance and Reconnaissance, Position Navigation and Timing, Space Situational Awareness, Space Control, and Weather across all classes (Class 1 “Rapid Sats” to Class 3 “Flagships”).

In support of the RISE contract, Axient provides:

- **Program Management**
- **Mission Design:** Analytic modelling of enterprise objective and translation to individual mission formulation; systems engineering translating requirements into initial designs
- **Implementation:** Engineering, including systems, software, and test engineering; systems engineering support; flight hardware design, fabrication and assembly
- **Assembly, Integration, and Test:** laboratory research engineering, design, scheduling test preparation, software and operation; flight payload and experiment integration and test
- **Experimental Demonstrations:** spacecraft launch integration, commissioning and on orbit experimentation; integrated ground experiments, design fabrication and assembly; ground system development, integration, test and deployment; mission planning and operations
- **Technology Transfer** of lessons learned and technology capability to enterprise partners

Current Missions Supported

- Small Satellite Portfolio (SSP): Very Low Frequency Propagation Mapper (VPM), ASCENT, Recurve, XVI
- Space Solar Power Incremental Demonstration & Research (SSPIDR)
- Navigation Technology Satellite-3 (NTS-3)
- ESPA Augmented Geostationary Laboratory Experiment (EAGLE)
- Demonstration and Science Experiments (DSX)
- AFRL Rapid Architecture Prototyping and Integration Development (RAPID)

COOPERATIVE SMALL AEROSPACE TESTING

Through a Cooperative Research and Development Agreement (CRADA), Axient provides other government agencies and commercial industry access to the AFRL's premier test assets (thermo vacuum chambers, vibration tables, and clean rooms, to name a few) at very affordable costs.

ABOUT AXIENT

Axient is headquartered in Huntsville, Alabama and is a proven leader in providing nationally significant services and solutions in defense, space, and commercial programs to the Federal Government, with deep domain expertise and capabilities in space & missile engineering solutions; systems engineering & integration; modeling, simulation & decision analysis; and test, evaluation, and logistics. With over 2,200 employees and locations in Alabama, Tennessee, Florida, California, New Mexico, Colorado, and the National Capital Region, we provide local expertise and program management to our customers, which means faster response times and an easier partner to reach. Axient holds multiple MAC/GWAC contract vehicles and has four subsidiaries: MEIS, DCI, SEG, and MBS; and is certified in the following: ISO 9001:2015, AS9100 Rev D, CMMI-DEV Maturity Level 3, and has a DCMA Purchasing System, DCMA Property System, and DCAA Accounting System.

