

Axient Capability Highlight: Launch & Integration Services Multi-Disciplinary Engineering



Executive Summary

For decades, Axient Launch & Integration Services (L&IS) has successfully partnered with NASA, DoD, FAA, NOAA, and commercial space launch providers in delivering engineering, operations, program support, safety & mission assurance, range operations, and IT services on highly complex space, aeronautics, and near-space programs. We specialize in systems engineering and integration, multi-disciplinary engineering, assembly, integration, test, and operations for a wide range of space missions including spacecraft, scientific payloads (including ISS payloads), robotic systems, and small and large launch vehicles, including crewed missions. Our culture and responsiveness for our customers paired with our experience and agility delivers value to our customers. We take care of our employees, who in turn, take care of our customers.

Who We Are

Breakthrough Solutions for Mission Success

New challenges demand new thinking. The changing landscape and our nation's critical missions demand adaptive, innovative, and accelerated solutions with new ideas. At Axient, we're driven to new solutions for what comes next, whether new approaches, new insights, or new technology to advance the mission forward. From engineering design to mission operations and sustainment, we provide engineering expertise and technical insight that enables customer missions to rise to every challenge. We provide these services in support of a project or mission, and as the turnkey mission service provider.

Delivering at Mission Speed

Innovation without responsiveness only solves yesterday's problems. At Axient, we leverage our engineering, customer expertise and proven development process to drive solutions at the speed of mission, to ensure our customers are always ahead of the challenge.

Get to Know Us

Axient advances customer missions with multi-domain test and analysis, multidisciplinary engineering and mission operations, and advanced technologies. We partner with our customers to identify and analyze their most important challenges and design solutions that turn challenges into breakthroughs to accelerate assured performance. Our capability spans the project life cycle (formulation through operations) and with our extensive domain expertise, we rapidly develop mission-enabling technologies to make our customers successful. With an unwavering commitment to mission success, we make customers more capable, decisions more informed, systems more efficient, and outcomes more certain.

Customers

- U.S. Air Force
- U.S. Space Force
- National Aeronautics and Space Administration (NASA)
- National Oceanic and Atmospheric Administration (NOAA)
- Federal Aviation Administration (FAA)
- Commercial Space

Recent Programs Supported

- NASA Launch Systems- Artemis, Orion and Space Launch System, Commercial Crew Program, Expendable Launch Vehicle Services Program, International Space Station and Re-supply missions, ISS docking, Gateway and Lunar Landing, Exploration Ground Systems, Wallops Flight Facility Missions
- NASA Spacecraft, Satellite and Payload- James Webb Space Telescope, Nancy Grace Roman Space Telescope, PACE, OCI, LandSat 9, Weather Balloons, GOES, Space Weather Follow-on, JPSS, Earth Sciences, CubeSATS, OSAM-1
- NASA Aeronautics- Global Hawk/Sky Range, X-57, X-59, National Campaign Air Mobility, Hypersonics, UAV Model Shop, SOFIA, Breathing Air Assessment
- Special Programs - NASA GLOBE, NASA Autonomous Flight Termination Unit (NAFTU), NESC Support, Mission Planning and Range Safety, HALO, xEMU



What We Do

Core Competencies

Axient L&IS delivers superior, custom-tailored engineering & technical services through end-to-end capabilities providing innovative, mission-oriented expertise to government and commercial customers. We provide our customers depth & scale in the following core capability areas:

Multi-Disciplinary Engineering

- Multi-Disciplinary Engineering (Electrical, Mechanical, Structural, Electro-Mechanical, S&MA)
- Systems Engineering & Integration (Agile, Model-based)
- Design, Development, Integration & Test
- Research & Development
- Modeling and Simulation
- Quality Engineering and Inspection
- Software Engineering - Flight and Ground
- Software Engineering - Algorithm Development
- Facility Planning and Engineering
- Specialized Lab Engineering
- Operations Hazard Management and Maintenance
- Specialized Equipment Operations and Maintenance
- Niche Engineering Skillsets - Guidance, Navigation, and Control (GNC) Avionics, Flight Dynamics, Command and Control, FPGA, Battery Expertise, Data Acquisition, Lifting Devices Evaluation, Non-Destruct Evaluations, Non-Destruct Testing, Pressure Vessels

Test and Evaluation

- Planning, Scheduling, Coordination, and Conduct of Tests
- Verify and Validate Systems Perform to Requirements
- Testing of Large-Scale Complex System of Systems
- HWIL/SWIL Simulations
- Independent Verification and Validation (IV&V)

Mission Services

- End-to-End Mission Services
- Formulation Through Operations
- Supply Chain Management
- Facilities, Labs & Equipment
- Launch Operations
- Range Safety and Range Operations
- Spacecraft Operations
- Mission Operations / Console Support
- Scientific Data Collection and Dissemination
- Large-Scale Website Development and Maintenance
- Space Logistics
- Post launch Processing
- Hazardous Operations and Oversight

Program Support

- Program Planning & Control
- Schedule Management
- Workflow Management
- Configuration Management / Data Management
- IT Security, Administration, Cyber & Project-Tailored Tools

About Axient

With over 2,200 employees, Axient is headquartered in Huntsville, Alabama and has provided premier services and solutions to the Federal Government for more than three decades. Axient's customers include the U.S. Army, U.S. Navy, Missile Defense Agency, U.S. Air Force, U.S. Space Force, and NASA. Axient is certified in the following: ISO 9001:2015, AS9100 Rev D, CMMIDEV Maturity Level 3, and has a DCMA Purchasing System, DCMA Property System, and DCAA Accounting System. Our history of success is attributable to our core philosophy of putting mission and customers first, empowering our program leaders, and eliminating barriers to success for our customers by providing value-added, mission-oriented services and solutions.

Statistics

25+

Years of
Engineering
Experience

30,000+

Launch
Operations
Tasks Supported

1000+

Missions
Supported