Best-in-Class

TEST, EVALUATION & TRAINING

ASTRION™

WE DELIVER CUTTING-EDGE TEST & EVALUATION SERVICES THAT DO NOT JUST SAFEGUARD OUR CUSTOMERS' MISSIONS, THEY FORTIFY NATIONAL SECURITY.

Advancing National Security Through Precision Testing

Our expert team tests and enhances the world's most complex systems, from tactical missiles like the Precision Strike Missile (PrSM) and aviation platforms, to cybersecurity solutions that thwart advanced threats and space launch systems powering NASA's missions. We ensure these systems perform flawlessly under the toughest real-world conditions, whether it's a missile hitting its target at hypersonic speeds or a satellite enduring the harsh environment of space.

We Conquer Challenges Across Multiple Domains With Precision and Innovation:

- **UAS & C-UAS Systems:** We specialize in testing and evaluation of Unmanned Aerial Systems (UAS) and Counter Unmanned Aerial Systems (C-UAS) to ensure performance, security, and reliability.
- **Cybersecurity Solutions:** We simulate sophisticated cyberattacks to uncover weaknesses and strengthen defenses, ensuring resilience against everything from ransomware to nation-state threats.
- **Tactical Missiles:** We validate guidance, propulsion, and launch systems, guaranteeing pinpoint accuracy and reliability for mission-critical operations.
- **Aviation Platforms:** We test every facet of aircraft, from avionics to airframes, ensuring unmatched safety and performance in the skies.
- **Space Launch Systems:** We push space technologies to their limits, confirming they can withstand extreme conditions and deliver success beyond our atmosphere.
- **Range & Test Facilities:** We manage hypervelocity testing and integration at advanced test ranges, utilizing high-speed cameras, Doppler radar, and other instruments to capture performance data and maintain safety protocols.
- **Environmental & Stress Testing:** Subjecting systems to extreme conditions (temperature, vibration, shock, corrosion) to simulate real-world deployment. We evaluate system durability through rigorous testing in environmental chambers and with mechanical stress simulations.

Mission & Innovation:

Astrion is at the forefront of defense, aerospace, and cybersecurity testing, ensuring cutting-edge systems meet mission demands. Through innovation, efficiency, and engineering excellence, we enhance national security and sustain technological superiority.

Engineering Excellence:

- **U.S. Air Force – Arnold Engineering Development Complex (AEDC):** Through Beyond New Horizons (Astrion + Fluor), Astrion delivers a 12-year, $3.7B Test Operations & Sustainment II program that pairs deep flight-test pedigree with modern digital toolsets: digital engineering "shift-left," integrated, data-driven management, and higher test-cell throughput.
- **Missile Defense Agency:** Expertise in flight tests, ground tests, cyber evaluations, and wargames, supporting systems like GMD, THAAD, AEGIS/SM3, and C2BMC. Our team of engineers and analysts have provided expertise to 100+ Flight Tests, 50+ Ground Tests, 30+ Cyber Tests, and 150+ wargames and exercises.
- **Yuma Test Center, C-UAS**: Astrion supports PEO Missiles and Space in testing Counter-Unmanned Aircraft Systems (C-UAS) at Yuma Test Center. The Ground-Based Operational Surveillance System – East (GBOSS-E) site serves as one of our operational hubs, featuring climate-controlled data analysis and logistics infrastructure. Our custom-built Data Collection Management System (DCMS) enables real-time analytics, reinforcing our leadership in C-UAS evaluation.
- **U.S. Air Force:** Supporting AEDC hypersonic CTF in its role as the Executing Test Organization (ETO) for all USAF hypersonic programs. We've executed >$50M in Hypersonic test portfolios since 2016.
- **U.S. Army:** $910M Redstone Test & Engineering Services (RTES) contract for UAS, missile and aviation technology advancements.
- **U.S. Navy:** RDT&E for Unmanned Undersea & Surface Vehicles (UUV/USV), C4N testing, and autonomous systems integration.
- **NASA:** T&E for the Space Launch System (SLS), ISS, and Kennedy Space Center labs.
- **96th Cyberspace Test Group:** Conducting efficient cybersecurity assessments to streamline Risk Management Framework (RMF) updates, reduce disruptions, and ensure system integrity. Using innovative threat simulations, we enhanced risk management, while compliance and risk data from assessments enabled swift Authorization to Operate (ATO) decisions, securing mission success.

T&E Surge Support:

We deploy advanced capabilities like CrewFlex, our proprietary workforce surge management system, to fulfill critical surge requirements that reduce time-to-deployment for qualified and certified test engineers and technicians. This rapid assembly of test teams also supports "shift-left testing" by enabling early integration of testing into the development process.

Our People:

We leverage cutting-edge digital engineering to transform T&E processes and generate "shift-left" testing reducing backlogs:

- **Uncovering Vulnerabilities:** Rigorously testing complex weapons systems to expose weaknesses before adversaries can exploit them.
- **Fortifying Cyber Defenses:** Countering evolving cyber threats with cutting-edge adversarial testing and digital hardening.
- **Pushing Unmanned Systems Beyond Limits**: Stress testing autonomous technologies to ensure operational excellence.
- **Validating Space Launch Technologies:** Evaluating launch platforms under extreme conditions, from scorching heat to subzero cold.

Digital Engineering Approach

Our expert engineers, analysts, and technical specialists push the boundaries of innovation to solve the toughest challenges in national defense.

- **Digital Twins & Simulations:** Create high-fidelity virtual replicas for testing missile systems, aircraft, and cybersecurity defenses under real-world conditions.
- **AI & Predictive Analytics:** Analyze vast datasets to predict failures, improve accuracy, and enhance system reliability.
- **Digital Thread Integration:** Maintain seamless traceability from design to testing, reducing integration issues and accelerating timelines.
- **Automation & Efficiency:** Use AI-driven automation for software validation, system testing, and data analysis, increasing speed and accuracy.
- **Cloud-Based Collaboration:** Enable real-time, secure collaboration and scalable testing with high-performance computing.

CONTACT

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