

ASTOS SOLUTIONS: GUIDANCE, NAVIGATION & CONTROL (GNC) EXPERTISE

YOUR PARTNER FOR RELIABLE AND INNOVATIVE SPACEFLIGHT SOLUTIONS

At Astos Solutions, we provide cutting-edge Guidance, Navigation, and Control (GNC) solutions, empowering you to achieve mission success with confidence. We combine proven algorithms with a customer-centric approach, offering both readily deployable software and expert services to meet your specific needs.

KEY OFFERINGS:

- End-to-End Lift-Off to Orbital Guidance: Leverage our flight-heritage-backed algorithms
 based on Powered Explicit Guidance (PEG) for precise and efficient trajectory control. Achieve
 optimal performance from launch to final orbit.
 - o Benefit: Proven reliability, optimized trajectory, reduced development time.
- Hybrid Navigation System: Our flight-validated hybrid navigation algorithm seamlessly
 integrates IMU and GNSS data, ensuring robust and accurate positioning and attitude
 determination. Easily reconfigurable to accommodate various (MEMS) IMU configurations.
 - o **Benefit:** Enhanced accuracy, increased resilience, flexible hardware options, drastically reduced cost.
- Robust Control Design Framework: Our intuitive control design framework accelerates the development, verification, and validation (V&V) of robust controllers. Transition from initial requirements to a fully validated controller in days.
 - Benefit: Faster development cycles, reduced risk, robust performance, simplified V&V.

WHY CHOOSE ASTOS SOLUTIONS?

- Source Code & Transparency: We provide full source code, comprehensive documentation, and tailored training, ensuring complete understanding and eliminating vendor lock-in. You maintain control and flexibility.
- **Flight Heritage:** Our algorithms are built upon years of experience and flight heritage, minimizing risk and maximizing reliability.
- Customized Solutions: We offer flexible service options, ranging from algorithm analysis and design to <u>full GNC Flight Software (FSW)</u> development, tailored to your specific requirements and budget.
- **Expert Support:** Our team of experienced GNC engineers provides dedicated support throughout the entire project lifecycle.
- Reduce Costs: By leveraging our tools, know-how, and algorithms, you will save costs across
 the value chain.

OUR COMMITMENT:

We are committed to providing our customers with the highest quality GNC solutions, backed by unparalleled support and expertise. We partner with you to achieve mission success and push the boundaries of space exploration.

OUR SERVICES:

- Algorithm Analysis & Design
- GNC System Development
- Flight Software Development
- Testing and Validation
- Custom Training Programs