

Optikos Meets Exacting Quality and Performance Requirements in Aerospace and Defense Applications

Optically-based technological advances in aerospace and defense have become not only increasingly sophisticated for key players in these sectors, but also vital as enabling technologies: "There is virtually no part of a modern defense system that is not impacted in some way by optics and photonics, even when the system is not optically based. Modern defense systems are migrating toward optically based imaging, remote sensing, communications, and weapons."* Optics-based sensors, in particular, make up a large part of intelligence, surveillance, and reconnaissance (ISR) systems.

The Optikos engineering team is experienced in a range of technologies and applications:



- Space-based
- Airborne sensor systems
- Ground sensor systems
- Observatories and systems for testing such optics
- Custom test stations
- Heads-up displays and sensors
- 3-D visualization
- Night vision
- Hyperspectral imaging
- Millimeter wave testing

Examples include:

- Optical system design and development to optimize pre-launch focus for daylight imaging of rocket launches
- Systems for testing night vision, thermal imaging, heads-up displays, and targeting systems
- Automated testing of targeting sensor system in production line, requiring a fully custom design driven by challenging optical requirements, including large aperture, low wavefront distortion, extremely tight pointing accuracy and a prescribed laser pulse duration and profile
- Rapid prototypes of a system that required simultaneous imaging at five different wavebands, including precise alignment, athermal performance and a single objective lens delivering multiple images to multiple cameras
- Competitive costing exercises to identify capable suppliers and areas for product cost reduction

Optikos can assist in providing an optically-based solution for your defense or aerospace application, supported by our longstanding ISO 9001 certification, DDTC registration and compliance with International Traffic in Arms Regulations (ITAR). For more information, complete our contact form or call us at +1 617-354-7557.

*Optics and Photonics: Essential Technologies for Our Nation (2013)