

SPACE-BASED MISSILE WARNING AND DEFENSE

L3Harris is propelling the space industry forward with responsive, agile and affordable end-to-end solutions for detecting and tracking missiles.

Accelerating our nation's missile warning and defense capabilities is critical to protecting our national security.

THE EMERGING THREAT

As global threats increase, so have our adversaries' missile capabilities. A new generation of missiles has taken center stage: hypersonic glide vehicles. These weapons are not only faster and more maneuverable than traditional ballistic missiles but are incredibly difficult to track. Because of the faint heat signature and unpredictable flight trajectory of hypersonic missiles, the only way to identify and track them is with advanced satellite technology.

To stay ahead of this emerging threat, the U.S. military is building a robust constellation of missile warning and defense satellites in both geosynchronous orbit (GEO), highly elliptical orbit (HEO), medium-Earth orbit (MEO) and low-Earth orbit (LEO).

PREEMPTIVE INNOVATION

L3Harris has an extensive 60-year history designing, building and testing infrared instruments in both GEO and LEO. With this expertise, L3Harris is adding vital tools to the U.S. military's multilayered approach to eliminate danger wherever it appears.

To advance missile warning and defense, L3Harris' solutions provide immediate and continuous global coverage of threats with highly sensitive instruments to find both dim and bright targets. Equipped with real-time onboard processing, our technology can follow hypersonics at different geometries and atmospheric conditions. With open design architectures, L3Harris can rapidly and affordably evolve capabilities to keep pace with evolving threats and missions.



BENEFITS

- > Secure and scalable ground infrastructure provides command and control of responsive space constellations as well as data processing
- > Mission-defining sensor technology provides critical missile detection with precision infrared imaging technology that can be produced at volume
- > Production capabilities built upon years of space mission experience but with the commercial speed of a nontraditional vendor



RESPONSIVE, RAPID AND RESILIENT SOLUTIONS

Threats to space-based missile warning and defense assets are growing by the day. In addition to rogue satellites and space debris, directed physical attacks and cyberattacks highlight the emerging risks the U.S. military must be prepared to combat.

L3Harris is redefining how to develop and deploy missile warning and defense satellites with responsive, resilient and affordable end-to-end solutions to quickly proliferate constellations and address threats.

L3Harris mission-defining technology is playing a critical role on several missile warning and defense satellite programs, including;

- > Hypersonic and Ballistic Tracking Space Sensor (HBTSS) for the Missile Defense Agency (MDA)
- > Tracking Layer for the Space Development Agency (SDA) missile-tracking program
- > Wide Field of View (WFOV) for the U.S. Space Force's missile warning satellite

By leveraging proven capabilities like infrared imaging, real-time detection algorithms and common interfaces and payloads, L3Harris is rapidly addressing their mission partners' most critical challenges, quickly and affordably.

PROVEN ON-ORBIT TECHNOLOGY

- > Proven ability to launch reconfigurable, multimission software-defined payloads at scale
- > Record of cost-effectively meeting right-sized performance requirements and balance life-cycle costs across an entire smallsat constellation architecture
- > Years of experience delivering essential payloads in multiple orbits to U.S. Department of Defense (DoD)

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L3Harris Technologies is an agile global aerospace and defense technology innovator, delivering end-to-end solutions that meet customers' mission-critical needs. The company provides advanced defense and commercial technologies across air, land, sea, space and cyber domains.



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1025 W. NASA Boulevard
Melbourne, FL 32919