

## **ARES AND HADES**

### **Rapidly Expanding U.S. Army ISR Technologies**

**L3Harris' Airborne Reconnaissance and Electronic Warfare System (ARES) missionization is advancing U.S. Army airborne ISR capabilities. ARES showcases the future of Army airborne ISR for its High Accuracy Detection and Exploitation System (HADES) program. ARES demonstrates how existing fleet sensors and technologies perform on a modern platform, with the size, weight and power (SWaP) to add new payloads for future mission requirements.**

L3Harris is also performing on the first phase of the Army's HADES Multi-Domain Sensing System (MDSS) program to develop, build, integrate and demonstrate prototype electronic intelligence (ELINT) and communications intelligence (COMINT) sensors onto the new HADES platform. HADES will address the demands of future multi-domain operations against peer- and near-peer adversaries, according to the Army.

The ARES technology demonstrator is capable of integrating capabilities from the Army's existing ISR fleet with capacity to add payloads, sensors and increase standoff ranges.

The aircraft can fly for up to 14 hours at mission altitudes above 41,000 feet and can activate Long Range Precision Fires to counter long-range threats. Flying above 41,000 feet increases aircraft survivability rates and line-of-sight, making ARES and HADES key sensor-to-shooter network enablers, directly supporting the Army's top modernization priority.

ARES is hosted on the Bombardier Global

6000/6500 class business jet, providing optimal size, weight, power, performance and affordability for the HADES program. ARES' extended mission range eliminates the need to operate near challenged or denied borders which reduces mission risk, something not possible with lower-altitude, shorter-range sensing systems. The original equipment manufacturer's green aircraft can host up to 14,000 lbs. of mission payload and has the power to run the Army's longest-range sensors, along with the SWaP capacity to accommodate future growth.

L3Harris has extensive experience integrating ISR payloads onto commercial aircraft and is a world leader in developing airborne ISR and EW solutions. The company is leveraging its more than 40 years of experience in missionizing business jet ISR aircraft to develop the latest sensing technologies. Our operationally-proven sensor solutions leverage decades of experience from prior programs and ongoing U.S. government and L3Harris investment.



#### **ARES PLATFORM**

- > Missionized in less than six months
- > Rapid sensor integration enabled by MOSA
- > Includes extended capacity future payloads and sensors
- > Flies above 40,000 feet for increased survivability and line-of-sight
- > Key Sensor to Shooter (S2S) network enabler
- > Hosted on Bombardier Global 6000/6500

#### **HADES MDSS**

- > Addresses the demands of future multi-domain operations against peer and near-peer adversaries
- > Combines scaled SIGINT hardware architecture with modernized battle-tested software
- > Exceptional deep sensing capabilities at altitudes up to 70,000 feet to support Long Range Precision Fires and significant standoff ranges
- > Counters ever-evolving threats through continuous SIGINT enterprise updates
- > Key S2S network enabler
- > Our operationally proven sensor solutions leverage decades of experience from prior programs and ongoing U.S. government and L3Harris investment



## FEATURES

- > Next-generation Army ISR technology
- > Fly for up to 14 hours at mission altitudes above 41,000 feet
- > Activate Long Range Precision Fires to counter long-range threats
- > Capacity to add payloads, sensors and increase standoff ranges
- > L3Harris' HADES solution aligns with requirements, offering a full-band system, ELINT and COMINT, with scaled SIGINT architecture
- > Offers Technology Readiness Level (TRL9) scaled SIGINT solutions that reduce government development and initial investment and provide the war fighter range, geolocation, mode of operation, and special signals

## BENEFITS

- > Flying above 41,000 feet increases aircraft survivability rates and line-of-sight, making ARES and HADES key Sensor to Shooter network enablers, directly supporting the Army's top modernization priority.
- > Extended mission range eliminates the need to operate near challenged or denied borders which reduces mission risk, something not possible with lower-altitude, shorter-range sensing systems.
- > The HADES signal search schemes employed are unsurpassed due to decades of SIGINT experience in architecting and designing world-class SIGINT receivers and processors
- > Partnering with DoD and agency customers, L3Harris collaborates constantly with the intelligence community to classify new signals and help develop the techniques to process, exploit, and disseminate those signals as an active participant of the National Mission Partner enterprise.
- > Open architecture design provides a key benefit to our customers to reduce vendor lock and overall sustainment costs.
- > L3Harris has been incorporating open standard hardware and software interfaces in systems for decades, allowing agile integration of third-party applications and hardware to add customized capability for specific missions.

