NEWS RELEASE

Curtiss-Wright and L3Harris Technologies to Demonstrate Breakthrough Advancements in ISR Data-at-Rest Encryption

U.S. Air Force FACE™ / SOSA™ TIM, DAYTON, Ohio – Curtiss-Wright's Defense Solutions division, a trusted leading supplier of ruggedized data storage systems, in collaboration with L3Harris Technologies, will provide the first live demonstration presenting certification-ready encryption of intelligence, surveillance, and reconnaissance (ISR) data with a read/write throughput of 10/17 Gbps (nominal/maximum) per data channel. The encryption device is designed to support two data channels which can be used simultaneously to deliver an aggregated throughput of 34 Gbps. This breakthrough technology provides system designers with an unprecedented combination of high-speed data recording and secure encryption. Curtiss-Wright and L3Harris have teamed to develop a family of Classified Data-at-Rest tactical data storage systems that use Non-Volatile Memory Express (NVMe) over Peripheral Component Interconnect Express (PCIe Gen 3) certification-ready encryption technology to support classified data storage up to U.S. Top Secret.

The demo features L3Harris' new certification-ready PCIe Gen 3-based DataCrypt NVMe Cryptographic Module running on Curtiss-Wright's high-performance hardware. The DataCrypt module has been designed and developed to achieve full NSA Type-1 certification. The combined solution delivers a near 50 percent improvement in encryption bandwidth compared to earlier SATA-to-SSD systems. The fully integrated demo system automatically monitors the RF spectrum to detect, isolate and classify ISR communications signals for secure situational awareness of mission environments. The resulting signal classification data is encrypted and securely stored, allowing for signal analysis and machine learning training. The demo will be hosted in Curtiss-Wright and L3Harris' adjacent booths in the SOSA area at the 2019 U.S. Air Force FACE / SOSA Exposition and Technical Interchange Meeting, on Sept. 17, in Dayton.

"We are very excited to team with L3Harris to demonstrate unprecedented high-speed crypto and recording technology for the encryption of ISR data in a rugged, deployable COTS system," said Lynn Bamford, Senior Vice President and General Manager, Defense and Power.

"Working in collaboration with Curtiss-Wright, we are focused on supporting the need for the highest possible data throughput in fielded ISR systems," said Don Hairston, President, L3Harris C5 Systems. "Our new DataCrypt cryptographic module leverages high-speed PCIe3 communications and high-performance NVMe storage technology to deliver up to 50 percent faster bandwidth than achievable over previous SATA-based architectures."

In addition to the DataCrypt module, the demonstration also showcases Curtiss-Wright's product line designed to be aligned with the SOSA Technical Standard, featuring the TrustedCOTS™ security-enabled CHAMP-XD1 DSP engine, VPX3-1260 Coffee Lake-based single-board computer and VPX3-687 Ethernet Switch. The integrated system, which is housed in Elma's E-Frame Development Platform designed for CMOSS and aligned with the SOSA standard, also features an AI-based machine learning software application and a CMOSS-compliant and SOSA-aligned 2 MHz-to-6 GHz phase coherent digitized tuner with four receive and one transmit channel.

Curtiss-Wright and L3Harris Demo Features:
- Up to 34 Gbps total read and write throughput
- Interoperable with O/S native NVMe drivers (NVMe 1.2) for host and storage devices
- Concurrent MLS processing of multiple classified levels from Unclassified to Top Secret
- NSA Type 1 certification-ready crypto engine
- Single-width XMC mezzanine card conforming to VITA 42.0 XMC (74 x 149 mm)
- Standard VITA 42.0 XMC and VITA 42.3 XMC PCI Express Protocol Layer (PCIe Gen3)

About L3Harris Technologies
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. L3Harris has approximately $17 billion in annual revenue and 50,000 employees, with customers in 130 countries. L3Harris.com.

About Curtiss-Wright Corporation

Curtiss-Wright Corporation is a global innovative company that delivers highly engineered, critical function products and services to the commercial, industrial, defense and energy markets. Building on the heritage of Glenn Curtiss and the Wright brothers, Curtiss-Wright has a long tradition of providing reliable solutions through trusted customer relationships. The company employs approximately 9,000 people worldwide. For more information, visit www.curtisswright.com.

For more information about Curtiss-Wright's Defense Solutions division, please visit www.curtisswrightds.com.

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