Thursday, February 12

9:40 AM – 10:00 AM

Accelerating Electronic Warfare for Manned/Unmanned Operations Through Cognitive EW, AI and Automated Threat Library Reprogramming

Michael Smith

Principal, Maritime Business Development

L3Harris Technologies

Abstract:

(U) L3Harris has developed an integrated cloud to edge ecosystem utilizing AI/ML algorithms to rapidly sense, make sense, and act across the spectrum. Our Distributed Spectrum Collaboration and Operations (DiSCO™) solution delivers high-power edge processing and watchteam backup for EW systems while enabling rapid classification of "unknown" emitters using AI/ML applications. DISCO™ uses current battlespace sensors and communication methods with an added cloud connected edge node supported by AI/ML to deliver distributed EW effects at the speed of combat. The DiSCO™ edge node is key to enabling accelerated Distributed Joint All-Domain Operations (JADO) across multiple platforms, connecting tactical edge EW systems with Service Component EW Reprogramming Analysts and Warfare Centers for EW reprogramming through a secure cloud connection, fundamentally changing how EW reprogramming is conducted across the Joint Force.

(U) DiSCO™ provides cloud-based data sharing and advanced AI/ML processing capabilities to rapidly classify "unknown" emitters, improve shared situational awareness, and synchronize EMS effects across a mesh network of platforms. Leveraging a suite of open software applications and distributed edge nodes, DiSCO™ enables the warfighter to sense, make sense and reprogram forward deployed SEWIP systems at the tactical edge.

(U) Tested and validated by Joint Service Component stakeholder and research labs, DiSCO™ has been successfully tested in Valiant Shield 2024, Silent Swarm 24 and Talisman Sabre 2024. Software defined solutions and edge computing power the 21st century Navy, and L3Harris is accelerating the proliferation of Cognitive EW capabilities to the edge to meet combat timelines for the Warfighter.