

SIGINT TECH EXPO AGENDA



October 11, 2018 | 9:30 AM - 6:00 PM

BWI Airport Marriott | 1743 W Nursery Road | Linthicum Heights, MD 21090

www.LeonardoDRS.com/TechExpo

9:30 AM On-Site Registration & Equipment Demo Room Opens

10:00 - 10:45 **Understanding the True SOSA: Hitting a Home Run for the SIGINT & EW Communities**
By Jason Dirner, U.S. Army

As SIGINT & EW systems increase in number, cost and complexity, users need to balance affordability, versatility and capabilities. The U.S. Army has defined a suite of open architecture standards to enable the reduction of C4ISR system size, weight and power (SWaP) while ensuring commonality across multiple platforms. The C4ISR/EW Modular Open Suite of Standards (CMOSS) will help drive momentum in the embedded industry away from costly, complex, proprietary solutions and towards COTS-based open architectures. The Sensor Open Systems Architecture (SOSA) builds on the CMOSS framework enabling government and industry to collaboratively develop further open standards and best practices. The sharing of hardware and software components will enhance and accelerate the deployment of affordable, capable, SIGINT & EW solutions.

10:45 - 11:30 **Everyone has Standards; Some Higher than Others: How Leonardo DRS Utilizes the Latest Standards to Help You**
By Steven Devore, Senior Electrical Engineer & VITA Chairman

Standards enable the multi-vendor interoperability critical for the modularity required within complex systems. Leonardo DRS recognizes the importance of standards, and continues to be a leader in its advancement. Serving as chairman for VITA 49, 66, and 67, standards give our partners an advanced look at the latest interface developments. Our most recent involvement expands from these VITA standards, and focuses on the Army's CMOSS (C4ISR/EW Modular Open Suite of Standards), Navy's HOST (Hardware Open Systems Technology) and Air Force's SOSA (Sensor Open Systems Architecture) initiatives. These efforts take a holistic view from the system perspective, and influence the development of component definition through VITA. This presentation will focus on the impact to Leonardo DRS products, and the benefits our customers will see in our latest products.

11:45 - 12:30

The Past, Present & Future of RF: Signals, Situations & Strategies

By Robert Watson, Senior Technical Director Systems Engineering

New signals are using wider bandwidths, higher frequencies, and complex modulations to support higher data rates. The communication situation has changed from fixed sites to more and more mobile applications. New strategies require radio hardware changes and operational innovation. This presentation outlines the new problems and their solutions.

12:30 PM

Complimentary Buffet Lunch

1:15 - 2:00

Next Generation Converged SIGINT, EW & Cyber Architectures - Leonardo DRS' Enabling Roadmap

By Ian Hill, Director Signal Solutions Line of Business

The disparate requirements of COMINT, ELINT, and EW type missions require frequency agile, high dynamic range, low spurious, multi-channel capabilities. Systems must have the features and performance to adaptively respond via software/firmware updates to new adversary threats. This is augmented by coordinated, distributed, multi-channel, network-centric systems. This presentation discusses various mission requirements and how Leonardo DRS' RF roadmap will satisfy these needs with a common hardware solution.

2:15 - 3:00

Intelligence Driven Cyber / EW

By Tom Gorsuch, Director Systems Engineering for Electronic Warfare

Electronic Warfare (EW) strategies are ever-changing to keep pace with the new technologies entering adversary arsenals. The next war will be won by the side that best exploits the electromagnetic spectrum through means of various over-the-air, cyber, and EW applications. Critical to success are increased standoff distance for self-protection, precision denial of service without detection, covert cyber injections, and intelligence based mission management. Networked sensing and coordinated attacks from disparate transceivers are necessary to minimize signature and maximize effect. This presentation will explore emerging techniques to achieve these requirements.

3:15 - 4:00

HF - A Paradigm Shift: New Signals, New Applications & New Exploitations

By Robert Watson, Senior Technical Director Systems Engineering

HF radio is changing dramatically with many new challenges and opportunities: very high data rate signals, fast frequency hoppers, tactical near vertical incidence skywave (NVIS), over-the-horizon (OTH) radar, large and small coherent antenna arrays, precision geo-location, non-cooperative de-hopping, automatic beam forming, multipath mitigation and co-channel interferer cancelation. These challenges all require new and innovative solutions. This insightful presentation will explore the exciting new HF landscape.

4:00 PM

Cocktail Reception with Hors d'oeuvres

6:00 PM

Equipment Demo Room Closes

