PODCAST:

PODCAST: AI and signal processing trends in electronic warfare and radar applications

Signal processing innovations are enabling artificial intelligence capabilities for electronic warfare, radar, and other military applications. In this podcast, Haydn Nelson, Principal Marketing Manager for Wireless Prototyping Deployment at National Instruments, discusses with me how AI can benefit the warfighter through embedded signal processing applications.

Read More +

TOP STORY

AI-enabled, Loyal Wingman UAV revealed by Boeing

A Boeing-led Australian industry team has presented the first unmanned Loyal Wingman aircraft to the Royal Australian Air Force, a historic milestone for the company and the Commonwealth according to officials.

Read More +

TOP STORY

Solar power satellite hardware tested in orbit

U.S. Naval Research Laboratory engineers launched the Photovoltaic Radio-frequency Antenna Module (PRAM), aboard an Air Force X-37B Orbital Test Vehicle as part of a comprehensive investigation into prospective terrestrial use of solar energy captured in space.

Read More +

MIL TECH TRENDS

Sensor payloads for military unmanned systems get smarter

Size, weight, power, and cost (SWaP-C) considerations are still driving military sensor payload designs for unmanned systems, but sensors are getting much “smarter” and processing tasks are now increasingly being performed right at the payload level.

Read More +

New SoM Speeds Custom RFSoC Deployment

Pentek's new QuartzXM SoM speeds custom deployment of RFSoC in SWaP critical
TOP STORY

Laser weapon modernization to be led by Dynetics

Dynetics, a wholly owned subsidiary of Leidos, is playing an integral role in the U.S. Army’s weapon modernization initiatives, where the latest directed energy weapon is increasing its power from a 100 kW-class system to a 300kW-class system.

Read More +

TOP STORY

F-35 production slowed due to pandemic, supply chain issues

Lockheed Martin, citing supply chain delays caused by the COVID-19 pandemic, said it will slow production of F-35 fighter planes and not fulfill deliveries. Production at its Fort Worth, Texas, facility will be reduced beginning next week, and its planned delivery target of 141 planes in 2020 will likely be 18 to 24 planes short.

Read More +

TOP STORY

AI-powered ISR capability introduced by Lockheed Martin

In partnership with the Air Force Test Pilot School, Lockheed Martin Skunk Works demonstrated an autonomous Intelligence, Surveillance and Reconnaissance (ISR) system to enhance operational effectiveness for the warfighter in denied communications environments.

Read More +

TOP STORY

Wearable sensor system for military toxins exposure wins defense contract

Intelligent biosensor/digital health provider PercuSense has won a contract worth $4.6 million from the U.S. government’s Defense Threat Reduction Agency (DTRA) and the Defense Innovation Unit (DIU) to develop a continuous monitoring platform for warfighters that enables early detection of toxic chemical exposure.

Read More +

MIL TECH TRENDS

Enabling infrared systems in UASs through SWaP optimization

Unmanned aerial system (UAS) platforms continue to reduce their size, weight, and power consumption (SWaP) and enhance their performance and functionality. These improvements are enabled by a new generation of sensing technology; one example is integration of high-performance infrared (IR) imaging systems onto reduced-scale aircraft.

Read More +

INDUSTRY SPOTLIGHT

Full-motion video distribution for defense using open-source Secure Reliable Transport

ISO/IEC 13818 Part 1 (ITU-T Recommendation H.222.0) – released in 1995 – describes the synchronization of audio and video using a Transport Stream container structure (TS, MPEG2-TS, m2ts). The Transport Stream is unique in that it serves as a container for streaming video and as a container for static video files.

Read More +
FACE/SOSA Expo and TIM event on for September

Officials at the Open Group and the consortia they manage - the Future Airborne Capability Environment (FACE) and the Sensor Open Systems Architecture (SOSA) - are organizing The Open Group FACE and SOSA Consortia Expo & TIM, to be held September 22, 2020 at the Holiday Inn Solomons Conference Center & Marina in Solomons, Maryland. FACE and SOSA Consortia Meetings will be held September will follow the expo at the same location from Sept. 23-25, 2020.

Read More +

Naval radar market shifting toward multirole and modular systems, study says

The radar technology landscape used in the naval arena is shifting toward multirole and modular systems, especially with the arrival of newer gallium nitride (GaN)-based active electronically scanned array (AESA) radars, according to the findings of a new market analysis from Frost & Sullivan, “Global Naval Radar Market, Forecast to 2028.”

Read More +

Hypersonic facility for U.S. Army now in development

Construction of the Bush Combat Development Complex is set to begin this fall after The Texas A&M University System Regents cast three votes to help transform how the U.S. Army prepares for future combat. Regents voted to amend the system’s capital budget, adding $79.3 million to begin development.

Read More +

Nano-UAV systems to supply Army sensor program

FLIR Systems, Inc. announced it has won an additional $20.6 million contract from the U.S. Army to deliver its FLIR Black Hornet 3 Personal Reconnaissance Systems (PRS). The nano-unmanned aerial vehicles (UAVs) will support platoon- and small unit-level surveillance and reconnaissance capabilities as part of the Army’s Soldier Borne Sensor (SBS) program.

Read More +

Making a case for small form factor embedded computing for military applications

Defense funding for unmanned and artificial intelligence (AI) systems is increasing by leaps and bounds, driving the need for computing systems to be smaller, faster, and more compatible. The demand for compatibility and commonality follows the convergence of open architecture initiatives like the Sensor Open Systems Architecture (SOSA), C4ISR/EW [electronic warfare] Modular Open Suite of Standards (CMOSS), and Modular Open Radio Frequency Architecture (MORA), just to name a few.

Read More +

Airborne tactical radio business acquired by BAE Systems

After reaching a definitive agreement in January, BAE Technologies Corporation’s Airborne Tactical Radios (Airborne Radios) business, intended to bring products and capabilities into the company’s Electronic Systems portfolio.

Read More +
Kobayashi Maru space tracking system provided to Space Force

The U.S. Space Force announced the development of a software package to track and monitor objects in space. The branch’s Space Command and Control Program Office called the operational platform — named Kobayashi Maru, for a training exercise depicted in a “Star Trek” episode — a breakthrough of particular use to a five-nation coalition of space observers.

Read More +

Kamikaze drones purchased by Israeli Ministry of Defense

Israel’s Ministry of Defense ordered 6.6-pound drones for its ground forces working in urban areas, maker Rafael Advanced Defense Systems Ltd. announced. The Spike Firefly is a loitering munition, also known as a kamikaze drone or suicide drone, a category in which the single-use munition loiters airborne in a target area, searches for targets, and attacks once one is located, exploding on contact.

Read More +

SparkCognition unveils new full-spectrum defense AI business

SparkCognition, company specializing in artificial intelligence (AI), announced the creation of SparkCognition Government Systems (SGS), full-spectrum AI company devoted to government and national defense, a first according to the company. SGS, a wholly owned subsidiary of SparkCognition, intends to offer next-generation, AI-powered systems to address national security needs.

Read More +

Thermal solutions for RPA to be developed with Additive Manufacturing

General Atomics Aeronautical Systems, Inc. (GA-ASI) has partnered with Australia-based Conflux Technology on the development of a heat exchanger. The part is being developed using a metal Additive Manufacturing process for possible integration onto GA-ASI's line of Remotely Piloted Aircraft Systems (RPAS).

Read More +

Laser Weapon System Demonstrator tested by U.S. Navy


Read More +

Webcast: SOSA and VITA: Enabling Open Standards for Improved Capability on June 24 at 2 pm Est

Elements of the Sensor Open System Architecture (SOSA) technical standard are leveraging standards developed by the VITA Standards Organization, specifically VITA 65, also known as OpenVPX. This harmonization between the services, industry, and industry standardization bodies helps drive the SOSA initiative’s strong momentum within the defense community. This webcast titled, “SOSA and VITA: Enabling Open Standards for Improved Capability,” to be held on Wednesday, June 24, at 2 pm Est., will cover how the SOSA Consortium is working with VITA to enable standardization of VITA-based standards within the SOSA Technical Standard.

Read More +
FACE Technical Standard, Solving Portability and Affordability Challenges in Avionics

**Date:** June 11, 11:00 a.m. ET

**Sponsored by:** CoreAVI, Lynx, Twin Oaks

[REGISTER NOW]