SPECIAL REPORT

Are satellites a cyberwarfare target?

Spoiler alert: Yes, they are – as militaries increasingly rely on satellites, especially in the age of guided munitions and hypersonic weapons, it's becoming critical to protect space assets from cyberattacks.

Read More +

TOP STORY

Unmanned surface vehicle program awarded to L3Harris Technologies

L3Harris Technologies has received a contract from the U.S. Navy for the Medium Unmanned Surface Vehicle (MUSV) program. This is the Navy's first program for an unmanned surface vehicle to support the Navy's Distributed Maritime Operations strategy.

Read More +

TOP STORY

NVIDIA-hardware partner and embedded computing supplier Connect Tech acquired by HEICO

HEICO Corp. acquired Connect Tech, a producer of embedded computing and NVIDIA GPU solutions for the military applications such as unmanned systems, communications, ISR (intelligence, surveillance, and reconnaissance) applications, and more various form factors such as ComExpress and PC104. As a subsidiary of HEICO Corporation, Connect Tech will continue to serve its global customer base.

Read More +

TOP STORY

Laser weapons for air defense being tested by U.S. Army

The U.S. Army is evaluating new air and missile defense systems — and testing laser weapons — after postponing some tests due to COVID-19. Soldiers from the 3rd Battalion, 43rd Air Defense Artillery Regiment and 3rd Bn., 6th Air Defense Artillery Air Missile Defense Test Detachment are involved in a limited user test of the Integrated Battle Command System (IBCS) that began in early July, according to a press release from the branch.

Read More +

RFSoC PCIe Board for Wireless Applications

The Model 7050 is an eight-channel A/D and D/A converter PCIe board based on the Xilinx Zynq® UltraScale+ RFSoC. A full suite of IP and software functions provide data capture, timing...
SOSA Technical Standard Snapshot 3 now available

Officials at the Open Group announced the Technical Standard for SOSA Reference Architecture, Edition 1.0, version 3 (snapshot) is now available for download. According to the Open Group, the document is a Snapshot of what will, after maturation, become the Technical Standard for SOSA (Sensor Open Systems Architecture) Reference Architecture, Edition 1.0.

Read More +

DARPA to hold aerial combat simulation between F-16 pilots and AI

An aerial combat simulation between an F-16 pilot and an artificial intelligence (AI) algorithm is part of the government-sponsored “Alpha Dog Trials”. Teams from eight defense contractors are scheduled to be involved in flying simulated F-16 fighter planes against AI-controlled planes in aerial combat, the U.S. Defense Advanced Research Projects Agency (DARPA), said Friday.

Read More +

Bridging the cooling gap in high-speed embedded systems

In the high-performance world of VPX for defense applications, aggregate payload power calls for creative strategies when addressing cooling at the chassis level as well. New high-performance applications will demand new inventiveness, if not outright new inventions, in applying and adapting established chassis-level cooling techniques while keeping costs down. Properly engineered VITA 48.2 chassis using air or liquid assist are capable of cooling payloads far more effectively compared to conduction-cooled-only chassis.

Read More +

Bringing microelectronics manufacturing to U.S. goal of Pentagon

The U.S. government aims to entice companies to do more microelectronics manufacturing in the United States, the Pentagon's undersecretary for acquisition and sustainment said Thursday.

Read More +

AI integrated into unmanned ground vehicles will transform forces, study says

The use of artificial intelligence (AI) in unmanned ground vehicles (UGVs) will transform force structures and change the defense market by expanding the use of UGVs in scenarios.
outside their most common ones -- including ordnance disposal and demining -- but will retain their main goal: to remove soldiers from harm's way, according to a new study from GlobalData, "Unmanned Ground Vehicles (Defense) -- Thematic Research.

Read More +

TOP STORY

Spy satellite to be launched out of Cape Canaveral for DoD mission

According to NASA officials, one of the most powerful rockets in service is scheduled to carry a classified spy satellite for the U.S. Department of Defense (DoD) aloft from Florida before dawn Thursday.

Read More +

TOP STORY

Hypersonic weapon system undergoes testing on B-52 Stratofortress

The U.S. Air Force and Lockheed Martin announced that they have completed the second hypersonic air-to-ground weapon test on a B-52 Stratofortress bomber out of Edwards Air Force Base, Calif. The second AGM-183A Air-Launched Rapid Response Weapon, ARRW, was flight tested Saturday, officials said.

Read More +

INDUSTRY SPOTLIGHT

Addressing the data challenges of modern electronic warfare and radar

Reconfigurable FPGA-based signal processors, optical streaming interfaces based on the Optical Data Interface (ODI) standard, and low-overhead packet standards based on the VITA Radio Transport (VRT) specification, combine to deliver unprecedented performance and flexibility for radar, electronic warfare, and signals-intelligence systems. These three new technologies converge to enable a new class of software-defined operational and measurement systems that are able to address these new challenges.

Read More +

TOP STORY

Cyberattack protection tech by Mercury Systems awarded patent

Mercury Systems, Inc., company specializing in secure mission-critical technologies for aerospace and defense, announced the receipt of a new U.S. patent covering various methods to protect controller area network (CAN)-based systems from malicious cyberattacks.

Read More +

TOP STORY

September FACE/SOSA Expo and TIM event moved to Spring 2021

MARKET RESEARCH

Military EO/IR systems market will be driven by situational awareness, information needs, study says
Due to the ongoing COVID-19 pandemic, officials at the Open Group and the consortia they manage - the Future Airborne Capability Environment (FACE) and the Sensor Open Systems Architecture (SOSA) - announced that the The Open Group FACE and SOSA Consortia Expo & TIM, originally scheduled for September 22, 2020 at the Holiday Inn Solomons Conference Center & Marina in Solomons, Maryland, the event will now be held Tuesday, March 23 at the same venue.

The worldwide market for military electro-optical/infrared (EO/IR) systems, valued at $12.3 billion in 2020, will undergo an overall compound annual growth rate (CAGR) of 2.32% to reach $15.5 billion by 2030, according to a new report from GlobalData, “The Global Electro-Optical/Infrared Systems Market 2020-2030.”

The worldwide market for military electro-optical/infrared (EO/IR) systems, valued at $12.3 billion in 2020, will undergo an overall compound annual growth rate (CAGR) of 2.32% to reach $15.5 billion by 2030, according to a new report from GlobalData, “The Global Electro-Optical/Infrared Systems Market 2020-2030.”

Due to the ongoing COVID-19 pandemic, officials at the Open Group and the consortia they manage - the Future Airborne Capability Environment (FACE) and the Sensor Open Systems Architecture (SOSA) - announced that the The Open Group FACE and SOSA Consortia Expo & TIM, originally scheduled for September 22, 2020 at the Holiday Inn Solomons Conference Center & Marina in Solomons, Maryland, the event will now be held Tuesday, March 23 at the same venue.
Flight tested aboard the Lockheed Martin F-16V aircraft in the United States. This follows the completion of JHMCS II safety qualification testing, including windblast, tower, and sled tests.

North Korea. The purpose of the satellites would be to complement the currently existing system of missile defense, which includes Japan's PAC-3 missile interceptors, according to officials.

TOP STORY

Centrifugal Impulse Drive introduced as new form of propulsion for space flight

Quantum Dynamics Enterprises, Inc. announced the introduction of the first propellantless drive for space flight. The Centrifugal Impulse Drive (CID) utilizes a new form of propulsion where electricity is turned directly into thrust to propel the spacecraft without expelling any mass.

GIVING BACK

Vets In Tech

This issue we are highlighting Vets in Tech (ViT), a national nonprofit organization that was founded to support veterans and returning troops by providing reintegration services where needed and connecting these recent and seasoned veterans – plus their spouses – to the U.S. national technology ecosystem.

TOP STORY

Wargaming center prototype in development for USMC

The U.S. Marine Corps (USMC) has awarded BAE Systems a contract worth approximately $19 million to develop a prototype design for a new state-of-the-art Wargaming Center to be built at Marine Corps Base Quantico in Virginia.

TOP STORY

Space Force tactical command and control contract won by Ball Aerospace

Ball Aerospace, teamed with Booz Allen Hamilton, has won a contract by the Space Rapid Capabilities Office (SpRCO) to serve as the prime system integrator for the SpRCO Ground Command, Control, and Communications (GC3) system.

Driving the heat out of embedded military systems: Reducing thermals

Sponsored by: ACT, Elma Electronic, LCR Embedded Systems, nVent Schroff

Date: September 15, 2:00 p.m. ET

VIEW NOW