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The Avionics Design monthly E-newsletter from the editorial staff of militaryembedded.com covers hardware and software avionics designs and certification issues in the commercial and military avionics markets in the U.S. and Europe via the Military Embedded Systems partnership with [Aviation Maintenance](#) magazine and the [Aerospace Tech Week](#) show.



CODE autonomy engine installed and demoed on Avenger UAS

EMMA HELFRICH, ASSOCIATE EDITOR

General Atomics Aeronautical Systems, Inc. (GA-ASI) conducted an autonomous flight using a government-supplied Collaborative Operations in Denied Environment (CODE) autonomy engine to support air-to-air targeting missions. The CODE autonomy engine was installed on a GA-ASI Avenger Unmanned Aircraft System (UAS).

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Army Using Digital Twins to Breathe new Life into Aging Helicopter Fleet

AVIATION MAINTENANCE MAGAZINE

The Army is turning to “digital-twin” technology to resolve challenges and boost efficiencies for its enduring fleet of Black Hawk helicopters.

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Mercury Systems announces it will acquire Physical Optics Corp.

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Mercury Systems has signed a definitive agreement to acquire Physical Optics Corp. of Torrance, California, a company that designs, develops, and integrates advanced technologies that are focused mainly on avionics and mission subsystems for the defense market.

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In-flight, self-adjusting turbine engines being researched by Army

EMMA HELFRICH, ASSOCIATE EDITOR

The U.S. Army Combat Capabilities Development Command (DEVCOM) announced that a team of U.S. Army and academic researchers have developed a novel design to automatically adjust aircraft rotor blade positions while already in-flight, a tactic intended to improve turbine engine performance.

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SOSA-aligned, multifunction processor to equip military aircraft

EMMA HELFRICH, ASSOCIATE EDITOR

Abaco Systems announced that it has won orders from a major U.S. prime contractor to deploy the company's single board computer and avionics solutions as part of a next-generation, Sensor Open Systems Architecture (SOSA)-aligned, 3U VPX embedded computer system for advanced electronic warfare (EW), signals intelligence (SIGINT), and intelligence, surveillance, and reconnaissance (ISR) applications.

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A Very Important Attribute

AVIATION MAINTENANCE MAGAZINE

FAA Administrator Steve Dixon announced on November 18, 2020, as we were going to press, that he was rescinding the order that grounded the Boeing 737 MAX aircraft 616 days after it was taken from the skies. What a long, strange trip it has been.

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AI and computer-vision software capable of deployment in safety-critical environments launched by CoreAVI

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Core Avionics & Industrial (CoreAVI) has launched what it calls its "Safe AI and Computer Vision solution" that uses its newest product, VkCoreVX SC, a safety-critical implementation of the Khronos Group's OpenVX1.3 API.

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Modernized E-99 jet delivered to Brazilian Air Force under Embraer contract

EMMA HELFRICH, ASSOCIATE EDITOR

Embraer delivered the first modernized EMB 145 Airborne Early Warning and Control (AEW&C), designated E-99, to the Brazilian Air Force (FAB). According to the company, four additional E-99 aircraft will be modernized as part of the contract.

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Open-architecture visual display system from Collins Aerospace gets nod from several training programs

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Collins Aerospace Systems (a unit of Raytheon Technologies) has received several orders for its updated visual display system (VDS), the Griffin-2, from two undisclosed fast-jet programs in the Asia-Pacific region.

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Magnetic anomaly sensor system to equip MH-60R helicopters

EMMA HELFRICH, ASSOCIATE EDITOR

CAE announced it has won a subcontract by Lockheed Martin to supply the CAE Magnetic Anomaly Detection-Extended Role (MAD-XR) system for U.S. Navy MH-60R Seahawk helicopters.

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VME: No time to die, again

ROBERT PERSONS, SMART EMBEDDED COMPUTING

The death of VMEbus – a technology used so heavily in military and aerospace applications – has, like the death of Agent 007, been predicted many times for many years, but all those premature death reports have never come to pass. Why?

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F-22 Identification Friend-or-Foe capability receives certification

EMMA HELFRICH, ASSOCIATE EDITOR

BAE Systems has received certification for its Identification Friend-or-Foe (IFF) transponder for the F-22 Raptor from the Department of Defense AIMS program office.

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INTEGRITY-178 tuMP RTOS selected by Army for Improved Data Modem program

EMMA HELFRICH, ASSOCIATE EDITOR

Green Hills Software, company specializing in high-assurance operating systems, announced that its INTEGRITY-178 Time-Variant Unified Multi-Processing (tuMP) RTOS was selected by the U.S. Army for the operating system upgrade to the Improved Data Modem (IDM-401) program.

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Paris Air Show Cancelled for 2021

AVIATION MAINTENANCE MAGAZINE

The organizers of the Paris Air show have announced that in light of the uncertainty linked to the current COVID-19 health crisis, the 2021 Paris Air Show has been cancelled. The event was scheduled to take place from 21 to 27 June 2021.

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SPONSORED WHITE PAPER

How to Deploy AI Datacenters in Planes, Trains, Ships and Automobiles

CURTISS-WRIGHT

John Cox at PureB2B discusses bringing the power of AI to the field with no performance compromises. Technologies such as advanced high-performance computing, storage, and connectivity can be packaged in compact, ruggedized enclosures that fit into planes, trains, ships, tracked vehicles, cars, trucks, and utility trailers.

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