AVIONICS >DESIGN

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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.

Starliner fist flight test completed by Boeing, NASA

JOHN MCHALE, GROUP EDITORIAL DIRECTOR

The Starliner Spacecraft completed its first flight test at the U.S. Army's White Sands Missile Range in New Mexico, according to officials from Boeing, the Starliner builder. This test of an uncrewed orbital flight vehicle was flown to demonstrate the quality and performance of the transportation system prior to crewed flights.

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Mission computers on A-10 USAF fleet to be replaced in modernization effort

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Raytheon Intelligence & Space (RI&S -- a Raytheon Technologies business) will replace the U.S. Air Force's the A-10C Thunderbolt II mission computer with the RI&S Common Open Secure Mission Computer (COSMC), which is a modernized processing system for combat systems aimed at enhancing air dominance and improving sustainability.

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UAS contract with Marine Corps

garners AeroVironment $6.2 million

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Unmanned-systems company AeroVironment announced that it won a $6.2 million firm-fixed-price contract award from the U.S. Marine Corps (USMC) to supply its Puma 3 AE small unmanned aerial system (SUAS) plus spares.

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Migrating legacy software from obsolete hardware to modern system environments

DENIS SMETANA, CURTISS-WRIGHT
RUSSELL OBERT, NORTHROP GRUMMAN

Virtualization software and model-based design provide a path that not only enables system designers to maintain legacy software for avionics and other mission-critical systems but also makes it possible to migrate that code to modern higher-performance processing platforms, for example from an older PowerPC-based VME board over to a new x86 or Arm-based VME or OpenVPX module.

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Perigon flight computer to be powered with Intel processor

EMMA HELFRICH, TECHNOLOGY EDITOR

Collins Aerospace announced that its Perigon computer will be the first certified aviation solution to use the Intel Atom x6400E processor. The processor will underpin Perigon's ability to support customers' next-gen flight control and vehicle management needs across a range of commercial and defense platforms.

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Predictive engine maintenance: Harnessing the power of data

AVIATION MAINTENANCE MAGAZINE

Predictive engine maintenance harnesses the power of engine sensor data, digital monitoring/transmission tools, artificial intelligence-enabled big data analysis, and modern digital modeling techniques such as “digital twins” (creating virtual versions of engines whose “operational lifespans” mirror their physical counterparts) to predict maintenance issues before they occur.

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AI-enabled swarm technology to gain traction for military use, study predicts

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Swarm technology -- groups of uncrewed aerial systems (UASs) leveraging artificial intelligence (AI) that employ algorithms to augment the overall functioning of the system or group in real time-- is increasingly finding uses in military applications, according to a study by Market Forecast, "Swarm Technology -- Market and Technology Forecast to 2030."

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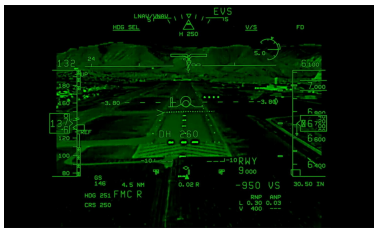

Enhanced vision systems from Collins Aerospace installed on Boeing 737s

JOHN MCHALE, GROUP EDITORIAL DIRECTOR

The new Enhanced Flight Vision System (EFVS) from Collins Aerospace is now being installed on Boeing 737 aircraft. The new EFVS includes the Collins’ EVS-3600, a multi-spectral imaging sensor to that enables pilots to “see through” poor visibility and darkness better than the human eye.

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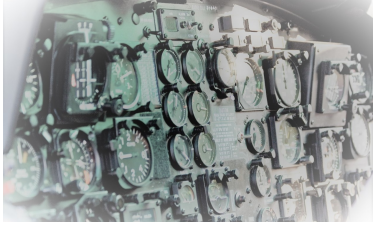
Avionics for vertical heavy-lift use nabs contract win for Mercury



Systems

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Mercury Systems won a contract worth $24 million contract award from a leading defense prime contractor for avionics systems that will be used in a rotary-wing platform for the vertical heavy-lift market.

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Collins Aerospace opens additive manufacturing center

AVIATION MAINTENANCE MAGAZINE

Collins Aerospace announced the opening of a new additive manufacturing center and the expansion of its maintenance, repair and overhaul (MRO) capabilities at its campus in Monroe, North Carolina.

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German C-130 Hercules to be equipped with missile defense system

EMMA HELFRICH, TECHNOLOGY EDITOR

Through the acquisition of three Lockheed C-130J-30 and KC-130J Hercules aircraft, the German Bundeswehr has announced it will equip all aircraft with HENSOLDT's latest generation of defense sensor technology, MILDS Block 2.

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MOSA strategy key to Bell Textron's addition of SNC to Invictus project

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Military rotorcraft maker Bell Textron has signed a teaming agreement with Sierra Nevada Corporation (SNC) that will add SNC to the Bell Textron team that is working on the Bell 360 Invictus competitive prototype as part of the U.S. Army's Future Attack Reconnaissance Aircraft (FARA) program.

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