



OCTOBER 2020

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.



Hypersonic-vehicle navigation system from Draper gets nod from Stratolaunch

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Engineering firm Draper will design, develop, and deliver a guidance, navigation, and control system for the next-generation Stratolaunch reusable hypersonic flight-test vehicle.

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North American Aerospace Industries Announces Merger with Aircraft Interior Recycling Association (AIRA)

AVIATION MAINTENANCE MAGAZINE

North American Aerospace Industries (NAAI, Kinston, North Carolina, USA), a provider of sustainable end-to-end aircraft recycling, has merged with Aircraft Interior Recycling Association (AIRA, Sheffield, South Yorkshire, United Kingdom), a total aircraft interior support company. While the news is formidable for both organizations, it also offers new opportunities for airlines, aircraft owners and OEMs to generate new revenue streams, gain savings, reduce their carbon footprints, and help address critical social needs; all of which have become more important in today's post-pandemic period.

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Thunderbolt™ 3: a worry-free migration path for avionics interfaces

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Helicopter cabin computer to be equipped with Abaco hardware

EMMA HELFRICH, ASSOCIATE EDITOR

Abaco Systems announced that it has won orders from a major European technology company that will see Abaco's range of hardware platforms be integrated into a new helicopter cabin computer.

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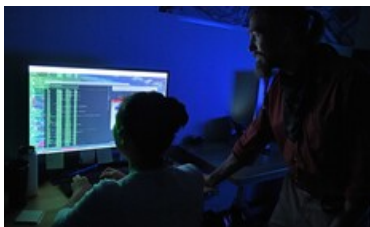


Australian KC-30A fleet to see upgrades on communications and mission systems

EMMA HELFRICH, ASSOCIATE EDITOR

Airbus has been selected by the Commonwealth of Australia (CoA) to develop a Communications and Mission System modernization upgrade for the Royal Australian Air Force (RAAF) A330 Multi-Role Tanker Transport (MRTT) fleet.

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Kubernetes open-source system leveraged on U-2 Dragon Lady

EMMA HELFRICH, ASSOCIATE EDITOR

The U-2 Federal Laboratory has leveraged Kubernetes during a local training sortie on a U-2 Dragon Lady assigned to the 9th Reconnaissance Wing at Beale Air Force Base. This represents the first time Kubernetes has flown on an operational major weapon system in the Department of Defense (DoD).

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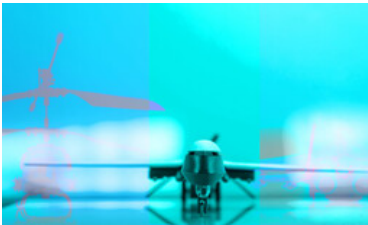


THE INDONESIA 737 MAX ACCIDENT: HOW IMPROPER MAINTENANCE ALLOWED A DESIGN FLAW TO BE FATAL

AVIATION MAINTENANCE MAGAZINE

It's been nearly two years since the tragic crash of Lion Air flight 610, a Boeing 737 MAX airplane that descended into the sea a few minutes after takeoff from Jakarta, Indonesia with 189 souls on board (see graphic showing flight path on page 37). It was the first of two MAX accidents that occurred within a five-month period that prompted the grounding of the hottest selling airliner in the world.

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Creating a trusted platform for embedded security-critical applications

RICHARD JAENICKE AND STEVE EDWARDS

Security-critical applications, such as cross-domain solutions (CDS), require a secure, trusted platform on which to execute, spanning software, firmware, and hardware. The lowest layer that the application interacts with directly is a trusted operating system (OS). Trust in the OS is dependent on two factors: its robustness from a security perspective, and assurance that the OS was both loaded and configured correctly and never tampered with. OS trust also depends partly on trusted pre-OS functionality, such as secure boot firmware that executes before the OS.

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Heads-up display system is development for Army helicopter pilots

EMMA HELFRICH, ASSOCIATE EDITOR

Elbit Systems of America has won a five-year firm-fixed price, indefinite delivery/indefinite-quantity contract with a maximum value of approximately \$50 million for the production of spare parts in support of the Aviators' Night Vision Imaging System/Head-Up Display system (ANVIS HUD).

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U.S. Navy V-22 will get LRU support from Elbit Systems of America

EMMA HELFRICH, ASSOCIATE EDITOR

Elbit Systems (Haifa, Israel) announced that its U.S. subsidiary, Elbit Systems of America, has won a contract worth approximately \$35 million from the U.S. Naval Supply Systems Command (NAVSUP) for repair of line-replaceable units (LRUs) in support of the V-22 Osprey multirole combat aircraft.

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VME technology from Abaco Systems to support European fighter aircraft fleet tech upgrade

LISA DAIGLE, ASSISTANT MANAGING EDITOR

Abaco Systems has received orders from a major prime contractor to support the upgraded computing capability of a European nation's fleet of 70 fighter aircraft.

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Integrated Battle Station cockpit modifications completed on B-1B fleet

EMMA HELFRICH, ASSOCIATE EDITOR

The U.S. Air Force has announced the completion of the Integrated Battle Station (IBS) on the B-1B Lancer fleet. The eight-year project has been completed earlier than anticipated, and 60 aircraft went through the modification process that began in late 2012.

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Ethernet PHY transceiver for military applications introduced by Microchip

EMMA HELFRICH, ASSOCIATE EDITOR

Microchip Technology Inc. announced its new VSC8540/41ET Gigabit Ethernet PHY RMII / RGMII Transceiver – a Commercial Off-The-Shelf (COTS)-based device upgraded for avionics and military applications.

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Loyal Wingman Aircraft engine tested by Boeing Australia

EMMA HELFRICH, ASSOCIATE EDITOR

Boeing Australia powered up the commercial turbofan engine on the first Loyal Wingman aircraft in September, as part of ground testing and preparations for first flight.

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Aerospace TechWeek.com banner for the 2021 event in Toulouse, France. The banner features the event title, dates (26/27 May 2021), location (Toulouse, France), and a row of six colorful puzzle pieces representing different industry sectors: Avionics, Connected AIRCRAFT, MRO IT, AEROSPACE testing, Flight Ops IT, and FACE. Below the puzzle pieces, it states '6 EVENTS UNDER 1 ROOF' and provides contact information for exhibition booths.

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Back to the (Electric) Future Howard Fuller

AVIATION MAINTENANCE MAGAZINE

In aviation right now, we are indeed living in such an era. The airlines are largely grounded and being an A&P Mechanic is not the guarantee of industry respect or lifelong employment it once was. In General Aviation, one can watch the grass growing among the training aircraft at most small airports. With the cost of avgas at

record levels, training is a luxury even well-to-do individuals can ill-afford. The news is not all bad, however.

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