

## Embry-Riddle Aeronautical University, Prescott, AZ College of Security & Intelligence Distinguished Cyber Intelligence & Security Speaker Series Mar. 1st, 1pm (AZ time), Davis Learning Center (DLC)

The College of Security and Intelligence (CSI) is excited to have Peter Skaves as our Distinguished Cyber Intelligence and Security (CIS) Speaker on Mar. 1<sup>st</sup>, 1-2pm (AZ time), in the DLC Auditorium. Please mark your calendars for this event and we hope to see you at the venue! Information on Mr. Skaves and his talk at the DLC is given below.

**Speaker**: Peter Skaves

Peter Skaves is FAA's Chief Scientific and Technical Advisor (CSTA) for Advanced Avionics, including cyber security issues. During his 25 years at the FAA, he has had various assignments including Special Projects Team Lead and Special Assistant to the Washington, DC Avionics Branch. Peter has developed training materials endorsed by the Institute of Electronic and Electrical Engineers (IEEE), and significantly contributed to policy, guidance and industry standards development for Electronic Flight Bag (EFB), Required Navigation Performance (RNP), Integrated Modular Avionics (IMA), Aircraft

Systems Information Security Protection (ASISP) and Automatic Dependent Surveillance (ADS-B) programs. He's also involved with the ongoing standards development for Unmanned Aircraft System (UAS). Prior to joining the FAA, Peter was employed by the General Electric Company for 12 years, in the role of staff development engineer and laboratory manager. Peter developed software and systems requirement for various airplane programs including the B-2 stealth bomber and C-17 cargo airplane fly-by-wire flight control systems.

https://www.faa.gov/aircraft/air cert/design approvals/csta/tech discipline/skaves/

**Talk title**: Aircraft Systems Information Security Protection (ASISP)

Talk abstract: Transport Category Airplanes are extremely safe due to fault tolerant designs including independence, redundancy, and no exploitable access point of failure that could on its own cause an unsafe condition during flight operations. But, as per the FAA, the two greatest threats to these aircraft is the exploitation of onboard electronic access points, such via the Internet, and counterfeit integrated circuits (ICs) and computer chips. The modern aircraft is increasingly connected to exchange timely information with a variety of systems and stakeholders, including advances such as WiFi/cellular network access, Electronic Flight Bags (EFBs), field-loadable software, real-time aircraft health monitoring and reporting, and passenger information and entertainment systems. 95% of computer chips used in airplanes are commercial-off-the-shelf (COTS) parts that are also used in other systems such as cell phones, personal computers, video equipment, data networking devices, and automobiles. This talk will present the various developments the FAA and the industry are pioneering to address these threats as well as future challenges and problems in aviation cyber security.

Join us and help secure the connected aircraft of the future!

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