AlAA Aerospace Cybersecurity Program Overview

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12 September 2020



Why Aerospace Cybersecurity?

- External developments are driving AIAA member needs for cybersecurity content and products
 - Real-world cyber threats and vulnerabilities (2020 Daily Launch editions with cyber stories: >98%)
 - Edge Research study, direct feedback from members at SCITECH show concern for new cyber policy/regulation challenges
- Strong membership interest in aerospace cybersecurity learning
 - Skill gaps noted anecdotally and in Edge Research data
 - 101/301-level Aerospace Cybersecurity Courses likely to fill immediate needs
 - In-person, instructor-led online, or on-demand online
- Cyber policy and marketplace responses—and associated compliance burdens—a rising challenge for aerospace
 - Significant impacts currently expected:
 - Cybersecurity Maturity Model Certification (CMMC): will apply first to all USG vendors (including non-IT products and services), private sector likely to follow
 - Cyber Solarium Commission: comprehensive slate of new cyber legislation applicable to a broad range of government and private sector enterprises, particularly critical infrastructure providers
 - On the horizon:
 - Government and private sector cyber compliance requirements for aerospace and adjacent industries/services such as satcom, position navigation and timing, urban air mobility, autonomy



Aerospace Cybersecurity Programming at AIAA

Forum Programming

- AVIATION: Steve Luczynski/Aerospace Village HUB presentation
- ASCEND: Cubesat Capture-the-Flag (CTF), Commercial Space Cyber Tabletop Exercise (TTX), Space Cyber Meta discussion; Cybersecurity Tutorial
- SCITECH: CTF, TTX, Plenary/F360/special session w/ISACs
- Online: Quarterly Aerospace Cybersecurity podcast or webinar for corporate members in development

Publications

- ➤ Daily Launch: 1-2 aerospace cybersecurity articles per day
- Aerospace America:
- Books

Learning

Developing initial training offering (101-level)



Aerospace Cybersecurity Program Outreach

Cybersecurity Steering Group

- Currently developing BoT recommendations, expected late October 2020
- Near-term recommendation emphasis: Forum programming and publications

Invigorating member engagement

- Aerospace Cybersecurity Working Group (ACWG)
 - Producing Aerospace Cybersecurity Tutorial for ASCEND
 - Increased use, enrollment in ENGAGE resource 100% increase since 1/1/2020; 22% increase since 5/1/2020
- Increased cyber engagement with Sections and Branches
- Increased cyber engagement with IS principal members

External Relations and Outreach

- Aerospace Village
 - Direct AIAA support to Aerospace Village during DEFCON, August 2020
 - Ongoing partnership pending
- Information Sharing Analysis Centers (ISACs)
 - Aviation ISAC
 - Space ISAC
 - National Defense ISAC





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