

NDIA Systems Engineering Conference

NDIA System Security Engineering Committee October 2018

Holly Dunlap

Raytheon

NDIA SSE Committee Chair

Holly.Dunlap@Raytheon.com

Cory Ocker

Raytheon

Cory.Ocker@Raytheon.com

- **Review NDIA SSE Committee Charter**
- **Introductions**
- **System Security Engineering Committee 2018 Accomplishments**
- **Formulating a 2020 Early Spring System Security Symposium sponsored by NDIA, INCOSE & IEEE**

System Security Engineering Committee Mission



Mission

To promote System Security Engineering integration into the Systems Engineering and Mission Assurance processes in the Department of Defense (DoD) acquisition of weapon systems. To foster the development of System Security Engineering methods, tools, techniques, and processes required for the role of System Security Engineers. To provide a forum for the open exchange of ideas and concepts between government, industry, *FFRDC and academia. To develop a new understanding of System Security Engineering and the critical role it plays to ensure system survivability in a cyber contested environment.

** Federally Funded Research & Development (FFRDC)*

System Security Engineering Committee Mission



Goals

The System Security Engineering (SSE) Committee seeks to:

- *Advance SSE technical and business practices within the aerospace and defense industry.*
- *Focuses on improving delivered system security performance including survivability, resiliency, and affordability.*
- *Promote and emphasize excellence in systems security engineering throughout the program life cycle and across engineering and non-engineering disciplines required for a holistic approach to system security and program protection.*

Objectives

- **Lead projects in areas that challenge the role and responsibility unique to System Security Engineering.**
 - *Projects may include but are not limited to providing a system security engineering industry perspective on draft or current System Security Engineering relevant government policies, government instructions, industry standards, industry best practices, customer requirements, risk management, etc.*
- **Support security specialty projects and initiatives by providing a system security engineering perspective.**
- **Encourage and promote the advancement, education, and skill development of the role of system security engineering.**

System Security Engineering Committee



How do we operate?

NDIA Systems Engineering Division (SED) Planning meeting in December.

Attended by OSD & Services Executive Leaders & NDIA SED Committee Chairs

OSD & Services communicate their plans and priority needs for the next year.

Committee Chairs work with their committee to draft a list of priority challenges & candidate projects.

1st meeting of the year, present both the Government SSE challenges and Industry SSE challenges.

The Committee then reviews and proposes projects to address the challenges / needs.

This process establishes the plan for the year. However as opportunities and needs are presented throughout the year, the committee has the opportunity to consider updating the plan.

The SSE Committee typically meets the afternoon of the NDIA Systems Engineering Divisional meetings which are posted on the NDIA Systems Engineering website. We also send out an e-mail to NDIA SSE Committee members so please let us know if you'd like to be added to the committee email list.

We welcome and encourage participation at all skill levels.

Welcome and highly encourage committee members to lead projects and foster collaboration with other security specialty committees and working groups.

***** The number of projects, workshops, collaborations etc. along with the depth, quality, and level of rigor is dependent on the committee members commitment.**

Introductions & Around the Room



- **Name**
- **Organization**
- **2018 Project Involvement**

NDIA SSE Committee 2018 Accomplishments



- SSE Committee Project - Risk, Issue, and Opportunity Management Guide for Cybersecurity.
- Office of the Secretary of Defense (OSD) Systems Engineering (SE) Cyber Resiliency Weapon Systems (CRWS) Workshop #6, Workforce Development, July 2018
- AF Cyber Resiliency Office of Weapon Systems (CROWS) Industry Round Table – April 25th & September 20th, 2018
- AF Life Cycle Industry Days, Weapon Systems Cyber Security / Resiliency Panel, September 13, 2018
- AF System Security Engineering Acquisition Language Guidebook v 1.3 Review and Comment
- NIST SP 800-160 Volume 2, Cyber Resiliency Considerations for the Engineering of Trustworthy Secure Systems. Review & Comment. Joint project with INCOSE SSE Committee.
- SAE Cybersecurity Workshop, January 22-23, 2018

This jointly sponsored SAE and NHTSA Vehicle Cybersecurity Workshop brought together experts from various sectors and government agencies dealing with cyber physical systems (CPS), including leading CPS thinkers from information technology, Industrial Control Systems, Internet of Things, Platform Information Technology, and embedded systems. Discuss actionable next steps and collaboration opportunities that would help address challenges unique to CPS architectures, including software, firmware, and hardware.

- SAE International Cyber Physical Systems Security Meeting, September 25th, 2018
- Collaboration with AF Aircraft Cybersecurity Industry Technical Advisory Group (CITAG)