

Status Report: June 2019

# 22<sup>nd</sup> Annual Systems & Mission Engineering Conference

**October 21-24, 2019**

***Hilton Downtown Tampa  
Tampa FL***

*Sponsored by*

**NDIA Systems Engineering Division**

*in partnership with*

**NDIA Integrated Program Management Division**

*In Conjunction With*

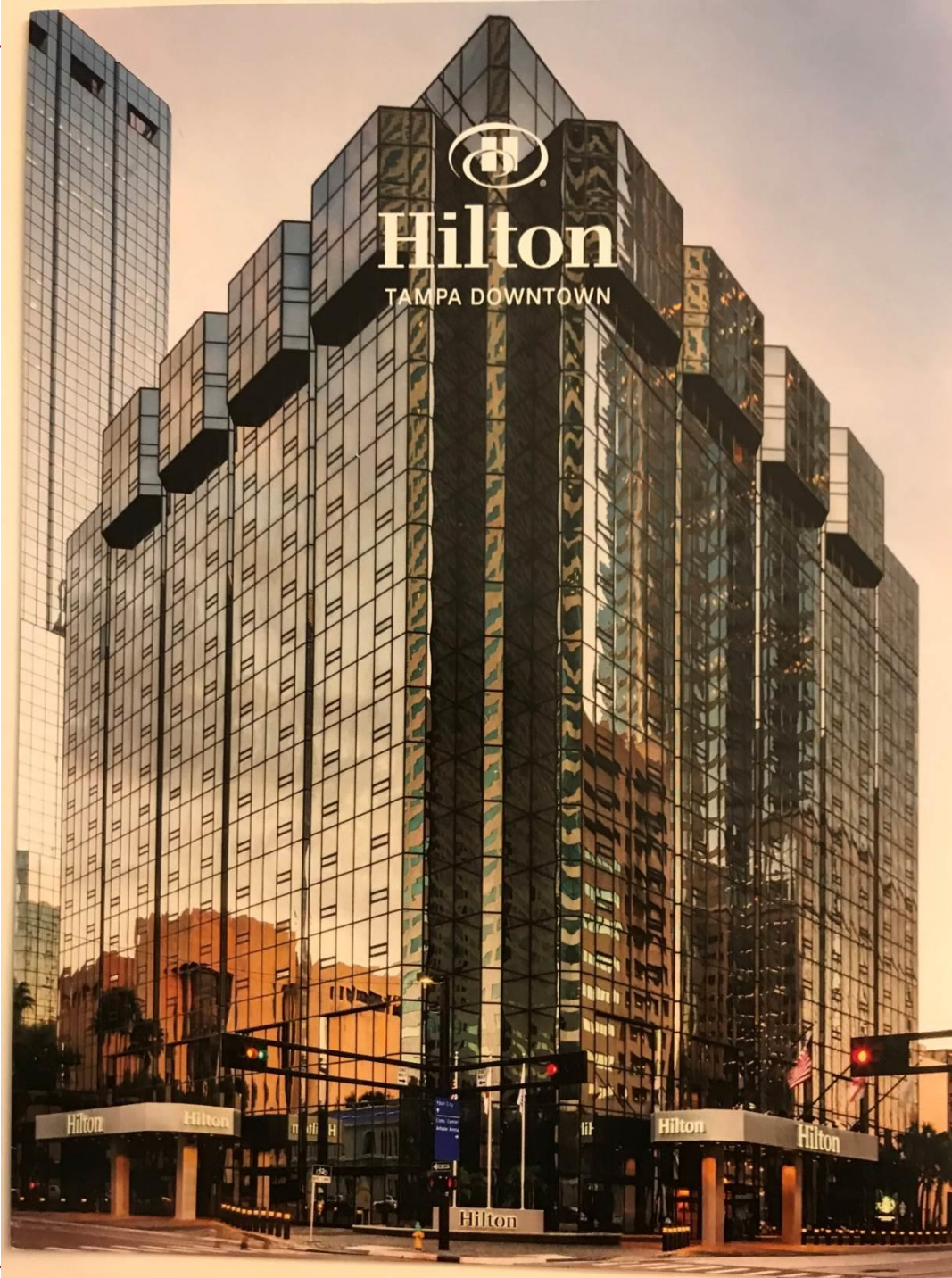
***Deputy Assistant Secretary of Defense, Systems Engineering (new titles?)***

*With participation by*

**IEEE Systems Council and IEEE Aerospace & Electronic Systems Society**

# NDIA

National Defense Industrial Association



# Call for Papers

- **Initial due date was May 17**
  - Only 125 abstracts in the system
- **Due date extended to June 7**
  - As of 9 PM June 5, 151 abstracts in the system
  - We should have at least 225 (we had 340 in 2017)
- **Committee chairs, SE Division members: please send last call for abstracts!**
  - And FYI – the submission site will actually remain open after June 7 so we can capture invited papers etc.
- **Friday June 14: Committee Paper Selection telecon**
  - Assuming I can get the spreadsheet dump from NDIA by Monday June 10 COB so I can reformat and send to Committee members.

**<http://application.ndia.org/abstracts/0870>**

# DoD engagement

- Despite a wee bit of turmoil at OSD they are supporting the conference.
- OSD plans to invite Dr. Michael D. Griffin as keynoter.
  - HON Griffin is Under Secretary of Defense, Research & Engineering, and former NASA Administrator
  - Backup: Dr Lisa J. Porter, Deputy Under Secretary of Defense, Research & Engineering
- **Planned Plenary Panels:**
  - Panel on Hypersonics & Directed Energy
  - Systems Engineering Panel from services & agencies
  - Acquisition PM Panel on Rapid Prototyping
  - *Plus the usual Industry Executives Panel*

# A few changes

- **OSD will not be doing a Digital Engineering Summit**
- **OSD will not be hosting an MBSE Tool Vendor track**
  - But we can do one if we organize it ourselves.
  - M&S Committee would have the lead



# IEEE Systems Security Symposium

SYSTEMS SECURITY  
symposium

**April 6-9, 2020**

**Primary Sponsorship by IEEE Systems Council and IEEE Aerospace & Electronic Systems Society**

**Technical co-sponsorship by INCOSE, NDIA Systems Engineering Division and Cyber Security Division, Systems Engineering Research Center (SERC), and University of Virginia**

In cooperation with

**Office of the Under Secretary of Defense for Research and Engineering (OUSD(R&E))**

# SSS 2020

- **Marriott Crystal Gateway Hotel, Crystal City VA**
- **April 6-9 2020**
- **Holly Dunlap is technical program chair; Beth Wilson is Technical Program co-chair.**
- **Support offered from Kristen Baldwin, OSD**
- **NIST has been invited**

# Scope

The IEEE-INCOSE-NDIA Systems Security Symposium seeks research papers and application studies that focus on the development of secure, safe, and resilient systems.

This symposium attempts to address the convergence of cybersecurity, safety, and engineering with interest in the effective application of security principles, methods, and tools to complex systems such as cyber-physical systems, autonomous systems, transportation vehicles, medical devices, large IoT systems, and other systems of interest.

Preference will be given to papers and case studies that bridge theory to practice.



# Specific Topics 1

- Systems Security Work Focused on Advancements in Theory, Practice, & Education
- Engineering of Safe, Secure, & Resilient Systems
- Examples of Mission/Systems Assurance & Assurance Cases
- Model Based Engineering Focused on Security, Safety, Trust, & Resiliency
- Affordable & Scalable Approaches to Hardware, Software, Firmware Assurance
- Novel Architecture Design & Analysis Examples or Trade-Space Studies
- Trust of Complex Systems with Emphasis on Cyber-Physical Systems
- Security Considerations for Machine Learning / Artificial Intelligence
- Large-Scale DevSecOps & Agile Approaches for System Development
- Verification, Validation, & Evidences for Secure System Development

## Specific Topics 2

- System Security Design Considerations for Cloud Environments
- Extensions of Formal Methods to System-Level Evaluation
- Cybersecurity in Manufacturing & Supply Chains
- Case Studies to Include Automotive, Transportation, Space, & Others
- Cyber-Physical System Event Detection, Investigation, Forensics, & Malware Analysis
- Tailored Risk Management Approaches for Large Complex Systems
- Attack/Defense Modeling, Simulation, & Characterization
- Techniques for Cyber Risk Buy Down in Legacy Systems Infrastructure, & Enterprises
- Policy, Ethical, Legal, Privacy, Economic, & Social Issues

# Additional Info

**Two types of submissions requested:**

## **Theory & Methods**

Papers or Extended Abstracts addressing novel ideas, theoretical issues, technology, methodology, or detailed studies. These academic-oriented papers will be peer reviewed and prioritized according to their contribution.

## **Cases & Practical Experiences**

Papers presenting practical ideas, lessons learned, and real-world achievements. Papers are reviewed for relevance but not necessarily academic contribution.

<https://2020.ieeesystemssecuritysymposium.org>



**DATES:**  
**July 31, 2019**  
Special Sessions &  
Tutorial Proposals  
**August 30, 2019**  
Initial Papers and  
Extended Abstracts