NDIA

21ST ANNUAL SYSTEMS ENGINEERING CONFERENCE
OCTOBER 22-25, 2018, TAMPA FLORIDA

CALL FOR PAPERS

ANNOUNCEMENT

The 21st Annual Systems Engineering Conference will convene on **October 22-25, 2018** at the Grand Hyatt Tampa Bay, Tampa, FL.

This conference will focus on improving acquisition and performance of Defense programs and systems, including system - of - systems engineering, systems security, net-centric operations and data/information interoperability, and all aspects of system sustainment. This conference is sponsored by the National Defense Industrial Association, Systems Engineering Division, with the Integrated Program Management Division, in cooperation with IEEE Aerospace and Electronic Systems Society, the IEEE Systems Council, and is supported by the Office of the Deputy Assistant Secretary Defense for Systems Engineering in the Office of Under Secretary of Defense for Research and Engineering.

BACKGROUND

The Department of Defense continues to seek ways to improve the acquisition of military equipment and capability to assist the warfighter in protecting the U.S. and its allies, and help oppressed nations around the world in a complex environment of ever-changing threats and conditions. The Weapon Systems Acquisition Reform Act (WSARA) of 2009 defines Systems Engineering as a key player in helping effect improvements in defense acquisition and program execution, to achieve more effective and affordable military systems.

Systems Engineering is the "umbrella" engineering function that serves as the key integrating function for these initiatives and successful program execution and helping maintain the balance between requirements, performance, cost, schedule, and overall effectiveness and affordability.

Systems Engineering principles embody strong technical and risk/opportunity management aspects, for the acquiring program office as well as the prime and subcontractors. Strong emphasis on systems engineering throughout the program, especially in early development planning, is a key enabler of successful programs and fielded defense systems.

The Annual Systems Engineering Conference explores the various roles of systems engineering from all aspects and perspectives— pragmatic, practical and academic—and brings key practitioners together to work on effective solutions to achieve a successful warfighting force.

CONFERENCE OBJECTIVES

This conference seeks to create an interactive forum for Program Managers, Systems Engineers, Chief Scientists, and Engineers and Managers from the Requirements, Design, Verification, Support, Logistics and Test communities from both Government and Industry. The conference will provide the opportunity to shape policy and procedures by exchanging innovative tactics and lessons learned, in the following specific areas:

- Acquisition Agility
- Agile Systems Engineering
- Aging Aircraft
- Application of Industry Best Practices Tools, Methodologies & Technologies
- Architecture
- Capability Maturity Model Integration (CMMI®)
- Continued Implications of Weapon Systems Acquisition Reform Act of 2009
- COTS Integration
- CREATE – Computational Research & Engineering Acquisition Tools and Environments
- Development Test & Evaluation – Systems Engineering Interaction
- Digital Thread
- Early Development Planning
- Environment, Safety, and Occupational Health (ESOH)
- ERS – Engineered Resilient Systems
- Human Systems Integration
- Improve Cycle Times for Design, Manufacture & Repair Processes
- Improve Mission Readiness & Systems Availability
- Integrated Diagnostics/ Prognostics/Enterprise Health Management
- Integrated Risk Management
- Interoperability & Net-Centric Operations
- Life Cycle Systems & Program Management
- Mission Assurance/Mission Engineering
- Model-based Systems Engineering
- Modeling & Simulation
- Modular Open Systems Approach (MOSA)
- Performance-Based Logistics
- Planning for Test & Evaluation
- Program Management
- Role of SE in IV&V
- Sustainment & Upgrade of Legacy Systems
- Systems Engineering Education & Training
- Systems Engineering Effectiveness
- Systems Security Engineering
- Systems-of-Systems Systems Engineering

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The primary objective of the conference is to provide insight, information and lessons learned into how we can improve the overall performance of defense programs via a better, more focused application of systems engineering that will lead to more capable, interoperable and supportable weapon systems for the warfighter, with reduced total ownership costs, to help our military meet its current and new mission area and capabilities requirements.

Technical and management presentations are a key tactic in achieving this objective. To this end, you are invited to submit a short (5000 characters/ estimated # words maximum) abstract of a presentation for a session as listed to the left. Abstracts must fully describe the planned content and how the presentations will advance the objectives of the conference and session. All accepted presentations will be delivered at the conference in electronic format; full papers are optional and are not required.

Abstracts must also include the following administrative information:
- presentation title
- author's name, title, and organization
- author's e-mail address, phone number, mailing address and the
- conference session targeted.

Abstracts must be submitted no later than **Monday, June 18, 2018** via the following web link:

http://application.ndia.org/abstracts/9870

Abstracts will only be accepted through this web link, and all required information must be completed. Upon submission of the abstract you will receive an e-mail confirmation, and another when selected.

Conference paper authors and presenters are not exempt from conference registration fees.

Timeline for Abstract Review & Acceptance
18 June – Deadline to submit abstracts
18 June – 7 August – Review submissions and create preliminary program
14 August – Send out acceptance notices and author/speaker guidelines
22-25 October – Present at Systems Engineering Conference

Sponsorships are available:
Contact Meredith Mangas, NDIA for additional information: mmangas@ndia.org.

For Additional Information:
Contact Conference Chair, Bob Rassa, rcrassa@raytheon.com