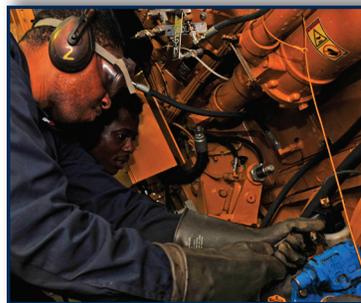


# 18<sup>TH</sup> ANNUAL SYSTEMS ENGINEERING CONFERENCE

## PRESENTATION TOPICS:

- ▶ Agile in Systems Engineering
- ▶ Architecture
- ▶ Better Buying Power/Affordability
- ▶ Developmental Test & Evaluation
- ▶ Engineered Resilient Systems
- ▶ Enterprise Health Management, Prognostics, Diagnostics, and Reliability
- ▶ Environment, Safety, and Occupational Health
- ▶ Human Systems Integration
- ▶ Modeling & Simulation
- ▶ Interoperability/Net-Centric Operations
- ▶ Program Management
- ▶ Software Engineering
- ▶ Systems Security Engineering
- ▶ Systems Engineering Effectiveness
- ▶ System of Systems



**OCTOBER 26-29, 2015**

**WWW.NDIA.ORG/MEETINGS/6870**

**WATERFORD SPRINGFIELD ▶ SPRINGFIELD, VA**

**EVENT #6870**

## TRACK OBJECTIVES

### AGILE IN SYSTEMS ENGINEERING

**Track Chairs:**

Ms. Mary Ann Lapham, *Software Engineering Institute*  
Ms. Beth Wilson, *Raytheon Company*  
Ms. Linda Maness, *Harris Corporation*

Agile usage is becoming more prevalent within the government space. Lessons learned and ideas for implementation can be shared with those who are experienced in using Agile concepts. This track brings together practitioners with experience applying agile methods in a variety of disciplines and domains, with the goal of collaboration to expand their effective use in systems engineering and on defense programs.

### ARCHITECTURE

**Track Chairs:**

Mr. Curtis Potterveld, *The Boeing Company*  
Dr. Steven Dam, *SPEC Innovations*

Architecture is a key element in systems engineering. This track addresses architecture frameworks, strategies, and applications to improve system design, test, operations, and support.

### BETTER BUYING POWER/AFFORDABILITY

**Track Chair:** Mr. Frank Serna, *Draper Laboratory*

Affordability is a key theme in the DoD's Better Buying Power 3.0 Initiative. This year's papers address the development of frameworks for affordability analyses including SE tools.

### DEVELOPMENTAL TEST & EVALUATION (DT&E)

**Track Chairs:**

Mr. Joe Manas, *Raytheon Company*  
Mr. Steve Scukanec, *Northrop Grumman Corporation*

Developmental Test and Evaluation is a key aspect of successful systems engineering. This track addresses the entire continuum of test and evaluation from early planning to operational testing.

### EDUCATION & TRAINING

**Track Chair:** Dr. Don Gelosh, *Worcester Polytechnic Institute*

The Education and Training track is an excellent collection of seven presentations from government, industry, and academia. The presentations describe workforce development activities across a wide range from STEM mentoring, industry certifications, the essence of a systems engineer, and accelerating development of senior technical leaders.

### ENGINEERED RESILIENT SYSTEMS (ERS)

**Track Chairs:**

Ms. Lois Hollan, *Potomac Institute*  
Mr. Al Coit, *Raytheon Company*

Engineered Resilient Systems (ERS) is a Department of Defense priority initiative that seeks to transform engineering environments so that warfighting systems are more resilient and affordable across the acquisition lifecycle. The track will present new results across the ERS initiative including anchor technologies and computational representation.

### ENTERPRISE HEALTH MANAGEMENT, PROGNOSTICS, DIAGNOSTICS, AND RELIABILITY

**Track Chair:** Mr. Andrew Monje, *ODASD, Systems Engineering*

The health of the system as a whole – the enterprise – is a critical function of systems engineering. This session will touch on some issues relating to the system health, including prognostics, diagnostics and reliability.

### ENVIRONMENT, SAFETY, AND OCCUPATIONAL HEALTH (ESOH)

**Track Chairs:**

Mr. Sherman Forbes, *SAF/AQRE*  
Mr. Dave Schulte, *SAIC*  
Ms. Lucy Rodriguez, *Booz Allen Hamilton*

The ESOH track is designed to provide a cross section of topics that reflect the many different Systems Engineering design considerations included under the acronym ESOH, as defined in MIL-STD-882E, the DoD Standard Practice for System Safety, and as used in DoDI 5000.02. The presentations address software system safety, hazardous materials management, occupational health and safety management systems, ESOH risk management, and the integration of ESOH considerations into the Systems Engineering processes for system development and sustainment. This year there is a special emphasis on the industry and DoD perspectives on the potential impacts to DoD systems from the European Union REACH hazardous materials management regulations.

### HUMAN SYSTEMS INTEGRATION (HSI)

**Track Chairs:**

Dr. Matthew Risser, *Pacific Science & Engineering Group*  
Mr. Patrick Fly, *The Boeing Company*

The HSI sessions include DoD policy maturation and implementation, and technical papers including the application of the Agile Process to operator interface design and HSI implications in designing for complex systems.

### INTEROPERABILITY/NET-CENTRIC OPERATIONS

**Track Chair:** Mr. Jack Zavin, *OUSD(AT&L)/DASD(C3CB)*

Interoperability is the ability to operate in synergy in the execution of assigned tasks both within the DoD and its external mission partners. Net-Centric Operations supports interoperability by providing the POPIM solution sets that allows the DoD and its mission partners to share information/data/knowledge when needed, where needed, and in a form they can understand and act on with confidence, while protecting it from those who should not have it. Interoperability/Net-Centric Operations includes technologies such as Service Oriented Architecture, Data Center, Cloud Computing, information transport [e.g. internet, web, radios, data links], as well as both hardware and software [aka Information and Communicative Technology] together with people, operating alone or in organizations, as part of the System of Systems Systems Engineering.

## MODELING AND SIMULATION (M&S)

### Track Chairs:

Dr. Jim Coolahan, *Coolahan Associates*

Mr. Jeff Bergenthal, *JHU Applied Physics Laboratory*

The M&S Track highlights the use of models and simulations in the systems engineering process. It includes sessions on Model-Based Systems Engineering (MBSE), integrated environments, tools & technologies, and M&S applications in several SE process phases.

## PROGRAM MANAGEMENT

**Track Chair:** Dr. Ken Nidiffer, *Software Engineering Institute*

Program Managers and Chief Systems Engineers should be the “joined-at-the-hip” leads on all programs that wish to be successful. This session will address some of the issues that our program managers face in the execution of programs.

## SOFTWARE ENGINEERING

**Track Chair:** Dr. Ken Nidiffer, *Software Engineering Institute*

Software is often overlooked when discussing systems engineering; yet software is a key element of most designs today and must always be part of the system engineer’s portfolio of responsibility. This session will highlight several significant software development issues.

## SYSTEMS ENGINEERING EFFECTIVENESS

### Track Chairs:

Mr. Joseph Elm, *L-3 Communications*

Dr. John Gill, *BAE Systems*

Systems Engineering Effectiveness is obvious to some and quite esoteric to others. The goal, however, improving the value obtained for each SE dollar spent, is shared by each who joins the discussion. Please attend the SE Effectiveness track to learn how your peers are implementing practical measures to better quantify the benefits of Systems Engineering and its value to Product Users and Developers alike. Early and effective Systems Engineering has been shown to return excellent value to all project stakeholders. This track will highlight the latest DoD policy and guidance, define new approaches, and provide some practical experiences to assist the DoD and defense industry SE community in achieving a quantifiable and persistent improvement in program outcomes through appropriate application of systems engineering principles and best practices.

## SYSTEM OF SYSTEMS (SOS)

### Track Chairs:

Mr. Rick Poel, *The Boeing Company*

Dr. Judith Dahmann, *The MITRE Corporation*

Mr. Jeff Wolske, *Raytheon Company*

The System of Systems track will feature papers highlighting development SoS engineering approaches, particular SoS SE application areas, and SoS tools and modeling.

## SYSTEMS SECURITY ENGINEERING (SSE)

### Track Chairs:

Ms. Holly Dunlap, *Raytheon Company*

Systems Security Engineering has become one of the most important aspects in the design of DoD systems. This track will focus on system security engineering and a holistic approach to program protection.

## CONFERENCE CHAIR

**Mr. Robert Rassa**, *Director, Engineering Programs, Raytheon Company*

## DIVISION CHAIR

**Mr. Frank Serna**, *Principal Director, Strategic Initiatives, Draper Laboratory*

## DIVISION VICE-CHAIR

**Mr. Joseph Elm**, *Director of Engineering, L-3 Communications*

## NDIA PLANNING TEAM

**Ms. Britt Sullivan**, *CMP, Director, Operations*

**Ms. Adrienne White**, *Meeting Planner*

## MONDAY, OCTOBER 26, 2015

8:00AM - 12:00PM	<b>Display Move In</b>	<b>Grand Foyer</b>
12:00PM - 7:00PM	<b>Registration Open</b>	<b>Grand Foyer</b>
1:00PM - 1:15PM	<b>Opening Remarks</b> Mr. Robert Rassa, <i>Director, Engineering Programs, Raytheon Company; NDIA Systems Engineering Conference Chair</i>  Mr. Frank Serna, <i>Principal Director, Strategic Initiatives, Draper Laboratory; Chair, NDIA Systems Engineering Division</i>	<b>Waterford Ballroom</b>
1:15PM - 3:15PM	<b>Chief Systems Engineers Panel</b> DoD and Federal Agency SE Leads will discuss systems engineering benefits/challenges.  <b>Moderator:</b> Ms. Kristen Baldwin, <i>Principal Deputy, Office of the Deputy Assistant Secretary of Defense, Systems Engineering</i>  <b>Panelists:</b> <ul style="list-style-type: none"><li>▶ Mr. Kevin Fahey, <i>Executive Director, System of Systems Engineering and Integration, Office of the Assistant Secretary of the Army, Acquisition, Logistics and Technology</i></li><li>▶ Mr. Dale Sisson, PE, <i>Director of Systems Engineering, Office of the Deputy Assistant Secretary of the Navy, Research, Development, Test &amp; Evaluation</i></li><li>▶ Mr. Jeffrey Stanley, <i>Associate Deputy Assistant Secretary of the Air Force for Science, Technology and Engineering, Office of the Assistant Secretary of the Air Force, Acquisition</i></li><li>▶ Mr. James Tuttle, <i>Chief Systems Engineer, Under Secretary of Science and Technology, Department of Homeland Security</i></li><li>▶ Ms. Michele Merkle, <i>Director, National Airspace Systems Engineering Office, Federal Aviation Administration</i></li><li>▶ Mr. Albert Spencer, <i>Chief Engineer, National Weather Service</i></li></ul>	<b>Waterford Ballroom</b>
3:15PM - 3:45PM	<b>Networking Break</b>	<b>Grand Foyer</b>
3:45PM - 5:15PM	<b>Industry Executive Panel</b> Industry executives provide real world examples for how systems engineering contributes to program success.  <b>Moderator:</b> Mr. Frank Serna, <i>Principal Director, Strategic Initiatives, Draper Laboratory; Chair, NDIA Systems Engineering Division</i>  <b>Panelists:</b> <ul style="list-style-type: none"><li>▶ Mr. Paul Bailey, <i>Chief Systems Engineer, Raytheon Company</i></li><li>▶ Mr. Mark Carlson, <i>Director, Defense Systems Engineering, Electronic Systems, BAE Systems, Inc.</i></li><li>▶ Mr. Reggie Cole, <i>Lockheed Martin Senior Fellow &amp; Master Architect Aeronautics, Lockheed Martin Corporation</i></li><li>▶ Mr. Craig Miller, <i>Vice President of Technology, Integration Management Office, Harris Corporation</i></li><li>▶ Mr. Chris Orlowski, <i>Director, Programs, Information Systems, Northrop Grumman Corporation</i></li><li>▶ Mr. Robert Scheurer, <i>Lead Technologist, Systems Engineering, Boeing Defense, Space &amp; Security</i></li></ul>	<b>Waterford Ballroom</b>
5:15PM - 7:00PM	<b>Networking Reception</b>	<b>Grand Foyer</b>

## TUESDAY, OCTOBER 27, 2015

7:15AM - 5:15PM	<b>Registration Open</b>	<b>Grand Foyer</b>
7:15AM - 8:15AM	<b>Networking Breakfast</b>	<b>Grand Foyer</b>
8:15AM - 8:30AM	<b>Opening Remarks</b> Mr. Robert Rassa, <i>Director, Engineering Programs, Raytheon Company; NDIA Systems Engineering Conference Chair</i>	<b>Waterford Ballroom</b>
8:30AM - 9:30AM	<b>Keynote Presentation</b> Mr. Stephen Welby, <i>Acting Principal Deputy Assistant Secretary of Defense for Research and Engineering; Performing the Duties of Assistant Secretary of Defense for Research and Engineering; Deputy Assistant Secretary of Defense, Systems Engineering</i>	<b>Singleton/Miller</b>
9:30AM - 10:00AM	<b>Networking Break</b>	<b>Grand Foyer</b>
10:00AM - 12:00PM	<b>DoD Program Managers Panel</b> DoD Program Managers will discuss program execution with respect to systems engineering. <b>Moderator:</b> Col Luke Cropsey, USAF, <i>Deputy for SE Plans &amp; Policy, Office of the Deputy Assistant Secretary of Defense, Systems Engineering</i> <b>Panelists:</b> ▶ <b>DoD Healthcare Management System Modernization (DHMSM) Program</b> ▶ CAPT John Windom, III, USN, <i>Program Manager, Defense Healthcare Management Systems Modernization</i> ▶ Mr. Jerry Hogge, <i>Deputy Group President, Health Solutions Group, Leidos, Inc.</i> ▶ <b>F-35 Lightning II Program</b> ▶ Mr. Robert Burnes, <i>Director of Propulsion, F-35 Lightning II Program Office</i> ▶ Ms. Cheryl Lobo, <i>Director, F135 Program, Pratt &amp; Whitney</i> ▶ <b>Small Diameter Bomb (SDB) II Program</b> ▶ Col Kevin Hickman, USAF, <i>Program Manager, Small Diameter Bomb (SDB) II Program</i> ▶ Mr. James Sweetman, <i>Program Director, Raytheon Missile Systems</i>	<b>Waterford Ballroom</b>
12:00PM - 1:30PM	<b>Luncheon</b> <b>Lt Gen Thomas R. Ferguson Systems Engineering Excellence Awards</b> <b>Individual Award Winner:</b> ▶ Mr. Stephen Henry, <i>(Retired) Northrop Grumman Corporation Information Systems</i> <b>Group Award Winner:</b> ▶ Air and Missile Defense Radar Systems Engineering Team, <i>Raytheon Company</i>	<b>Hazel Ballroom</b>

### DISPLAYS

- ▶ Dassault Systèmes Americas Corporation
- ▶ George Washington University's Master's Programs in Engineering Management and Systems Engineering
- ▶ Georgia Institute of Technology
- ▶ Jama Software
- ▶ Johns Hopkins Engineering for Professionals
- ▶ SPEC Innovations
- ▶ Systems Engineering Research Center

### POSTER PRESENTERS

#### 18008

Measuring the Value of Knowledge Management at Government Research and Development Centers and National Laboratories

- ▶ Ms. Cynthia Mendoza Chatelain, *NGA*

#### 18009

Constructing The High Reliability Organizational Maturity Model (HROMM): Evaluating Project

- ▶ Mr. Dorian Newton, *Huntington Ingalls Industries*

TUESDAY, OCTOBER 27, 2015 - CONTINUED

		1:30PM - 2:05PM	2:05PM - 2:40PM	2:40PM - 3:15PM
TRACK 1	SINGLETON	<p><b>Systems Engineering Effectiveness</b></p> <p>2C1</p> <p><u>17874 (Panel)</u> Systems Engineering Research: Different Approaches for Transitioning Systems Engineering Research into Practice</p> <ul style="list-style-type: none"> <li>▶ <b>Moderator:</b> Mr. Scott Lucero, <i>ODASD, Systems Engineering</i></li> <li>▶ Dr. Barry Horowitz, <i>University of Virginia</i></li> <li>▶ Dr. Tom McDermott, <i>Georgia Tech Research Institute</i></li> <li>▶ Dr. Richard Turner, <i>Stevens Institute of Technology</i></li> <li>▶ Dr. Navin Davendralingam, <i>Purdue University</i></li> </ul>		
TRACK 2	MILLER	<p><b>Modeling &amp; Simulation</b></p> <p>2C2</p> <p><u>17850</u> Modeling by Building Blocks: A Proposed Design Approach and Application in Supply Chain Management</p> <ul style="list-style-type: none"> <li>▶ Dr. Sondoss ElSawah, <i>Capability Systems Centre</i></li> </ul>		
TRACK 3	VON STERNBERG	<p><b>Systems Security Engineering</b></p> <p>2C3</p> <p><u>18018</u> Systems Security Engineering for Program Protection and Cybersecurity</p> <ul style="list-style-type: none"> <li>▶ Mrs. Melinda Reed, <i>ODASD, Systems Engineering</i></li> </ul>	<p><u>18073</u> Framework for Systems Security Engineering</p> <ul style="list-style-type: none"> <li>▶ Mr. Michael McEvelley, <i>The MITRE Corporation</i></li> </ul>	<p>Cybersecurity (CS) Implementation &amp; Acquisition Integration / CS Discipline &amp; CS Scorecard</p> <ul style="list-style-type: none"> <li>▶ Mr. Mitch Komaroff, <i>DoD CIO</i></li> </ul>
TRACK 4	SELLIER	<p><b>Developmental Test &amp; Evaluation</b></p> <p>2C4</p> <p><u>17959</u> SE-DT Interactions Through the Developmental Evaluation Framework</p> <ul style="list-style-type: none"> <li>▶ Dr. Suzanne Beers, <i>The MITRE Corporation</i></li> </ul>	<p><u>18086</u> Acceptance Test Driven Development -- Role of System Test in Agile Programs</p> <ul style="list-style-type: none"> <li>▶ Dr. Beth Wilson, <i>Raytheon Company</i></li> </ul>	<p><u>18010</u> Statistical Design and Validation of Modeling and Simulation (M&amp;S) Tools used in Operational Testing (OT)</p> <ul style="list-style-type: none"> <li>▶ Dr. Kelly McGinnity, <i>Institute for Defense Analyses</i></li> </ul>
TRACK 5	GIBSON	<p><b>System of Systems</b></p> <p>2C5</p> <p><u>17887</u> From Dual VEE to Dual Use – Introducing the SoS-VEE™ Model to Improve the Acquisition, Interoperability and Performance of Large System-of-Systems (SoS) Programs</p> <ul style="list-style-type: none"> <li>▶ Mr. Oliver Hoehne, <i>Parsons Brinckerhoff</i></li> </ul>	<p><u>17994</u> Intricacies of System of Systems Operational Availability and Logistics Modeling and Analysis</p> <ul style="list-style-type: none"> <li>▶ Mr. Charles Carter, <i>Sandia National Laboratories</i></li> </ul>	<p><u>18014</u> Evaluating System Models in a Table Top Exercise</p> <ul style="list-style-type: none"> <li>▶ Dr. Steven Dam, <i>SPEC Innovations</i></li> </ul>
TRACK 6	KORMAN	<p><b>Interoperability /Net-Centric Operations</b></p> <p>2C6</p> <p><u>17991</u> Interoperability/Net-Centric Operations Kickoff</p> <ul style="list-style-type: none"> <li>▶ Mr. Jack Zavin, <i>OUSD(AT&amp;L)/DASD(C3CB)</i></li> </ul>	<p><u>17787</u> Emerging Systems Engineering Standards for the Interoperability of Big Data Systems and Technologies</p> <ul style="list-style-type: none"> <li>▶ Mr. David Boyd, <i>InCadence Strategic Solutions</i></li> </ul>	<p><u>17809</u> Net-Centric Systems Design and Requirements Development</p> <ul style="list-style-type: none"> <li>▶ Dr. Craig Arndt, <i>Defense Acquisition University</i></li> </ul>

TUESDAY, OCTOBER 27, 2015 - CONTINUED

			3:30PM - 4:05PM	4:05PM - 4:40PM	4:40PM - 5:15PM
TRACK 1	SINGLETON	<b>Systems Engineering Effectiveness</b> 2D1	<u>17880</u> Department of Defense Systems Engineering Policy and Standardization ▶ Mr. Robert Gold, <i>ODASD, Systems Engineering</i>	<u>17877</u> A Systems Engineering Perspective on Enabling Innovation ▶ Col Luke Cropsey, USAF, <i>ODASD, Systems Engineering</i> <b>*Repeated in Track 1 at 11:25AM on Wednesday, October 28</b>	<u>17879</u> Mission Based Analysis in the Systems Engineering Process ▶ Mr. William Scott, <i>ODASD, Systems Engineering</i>
TRACK 2	MILLER	<b>Modeling &amp; Simulation</b> 2D2	<u>18047</u> Distributed Modeling and Simulation as a Service ▶ Mr. Joseph McDonnell, <i>Dynamic Animation Systems</i>	<u>18007</u> Using Systems Engineering to Identify and Develop Key Advancements in M&S ▶ Dr. Mark Riecken, <i>Trideum</i>	<u>17998</u> An Analytic Model for DoD Divestments ▶ Dr. Lisa Oakley-Bogdewic, <i>The MITRE Corporation</i>
TRACK 3	VON STERNBERG	<b>Systems Security Engineering</b> 2D3	<u>17963</u> Program Protection & System Security Metrics & Measures ▶ Ms. Holly Dunlap, <i>Raytheon Company</i>	<u>17972</u> SSE, An Enabler for Mission Assurance ▶ Mr. Daniel Holtzman, <i>The MITRE Corporation</i>	<u>17885</u> Identification and Protection of Critical Program Information (CPI) ▶ Mr. Raymond Shanahan, <i>ODASD, Systems Engineering</i>
TRACK 4	SELLIER	<b>Developmental Test &amp; Evaluation Program Management</b> 2D4	<u>18021</u> Lockheed Martin Test Architecture Model (TAM) ▶ Mr. Gary Stewart, <i>Lockheed Martin Corporation</i>	<u>17864</u> The National Cyber Range: A Systems Engineering Resource For Cybersecurity R&D, S&T, Testing and Training ▶ Mr. Peter Christensen, <i>OSD AT&amp;L TRMC</i>	<u>18034</u> Better Buying Power Through the Use of Agile Acquisition Strategies ▶ Dr. Julie DeSot, <i>DeSot Business Solutions, LLC</i>
TRACK 5	GIBSON	<b>System of Systems</b> 2D5	<u>18037</u> SoSE Considerations in SE Standardization ▶ Mr. Gary Roedler, <i>Lockheed Martin Corporation</i>	<u>18052</u> The Electronic Health Record and the Systems that Make Them Up ▶ Mr. Thomas Britten, <i>Deloitte Consulting, LLP</i>	<u>18058</u> Relative Comparison of the Rate of Convergence of Collaborative Systems of Systems: A Quantified Multi-Case Study ▶ Mr. Bernard Collins, II, <i>George Washington University</i>
TRACK 6	KORMAN	<b>Interoperability /Net-Centric Operations</b> 2D6	<u>17865</u> An Examination of Interoperability in Systems Development Using DoDAF ▶ Mr. Matthew Hause, <i>PTC</i>	<u>17910</u> Defense Intelligence Information Enterprise (DI2E) Plugfest ▶ Mr. John McDowall, <i>BAE Systems, Inc.</i>	<u>17745</u> The Nature of NextGen Military Networks ▶ Dr. Sherin Kamal, <i>SAIC</i>

5:15PM

Adjourn

WEDNESDAY, OCTOBER 28, 2015

7:00AM-5:50PM

Registration

7:00AM-8:00AM

Networking Breakfast

Grand Foyer

			8:00AM - 8:35AM	8:35AM - 9:10AM	9:10AM - 9:45AM
TRACK 1	SINGLETON	Systems Engineering Effectiveness 3A1	<p><b>17966</b></p> <p>Technology Transition Assessment in an Acquisition Risk Management Context</p> <p>► Mr. Lance Flitter, <i>Naval Surface Warfare Center, Carderock Division / PEO Ships</i></p>	<p><b>17816</b></p> <p>Requirements and References Decision Database and a Glimpse into the Future</p> <p>► Mr. Edward Durell, P.E., <i>U.S. Air Force</i></p>	
TRACK 2	MILLER	Modeling & Simulation 3A2	<p><b>17979</b></p> <p>Modeling and Simulation: Low Cost Development Sandbox for a Legacy Combat System</p> <p>► Mr. Benjamin Pinkus, <i>Raytheon Integrated Defense Systems</i></p>	<p><b>18077</b></p> <p>Co-Simulating Surrogate Models for Cyber-Physical Systems</p> <p>► Dr. Alex Van der Velden, <i>Dassault Systèmes SIMULIA Corporation</i></p>	<p><b>17886</b></p> <p>Business Implications of Moving to a Model-Based Enterprise</p> <p>► Mr. Brian Christensen, <i>Dassault Systèmes Americas Corporation</i></p>
TRACK 3	VON STERNBERG	Systems Security Engineering 3A3	<p><b>17847</b></p> <p>Improving Cyber Security of Systems, Systems of Systems and Networks Through Application of a Cyber Resiliency Architecture Framework</p> <p>► Ms. Suzanne Hassell, <i>Raytheon Company</i></p>	<p><b>18056</b></p> <p>Modeling and Analysis of Security for System Architectures</p> <p>► Dr. John Goetz, <i>WW Technology Group, Inc.</i></p>	<p><b>18020</b></p> <p>Systems Engineering and Systems Security Engineering Requirements Analysis and Trade-Off Roles and Responsibility</p> <p>► Mrs. Melinda Reed, <i>ODASD, Systems Engineering</i></p>
TRACK 4	SELLIER	Program Management 3A4	<p><b>17817</b></p> <p>NDIA IPMD Predictive Measures Guide</p> <p>► Ms. Sung Soon Stultz, <i>Rockwell Collins</i></p>	<p><b>17818</b></p> <p>NDIA - Integrated Program Management Division (IPMD)</p> <p>► Mr. Daniel Lynch, <i>Raytheon Missile Systems</i></p>	<p><b>18042</b></p> <p>What Happens and How: Understanding the Dynamic Mechanisms Behind the Results of Acquisition Program Assessments</p> <p>► Mr. William Novak, <i>Software Engineering Institute</i></p>
TRACK 5	GIBSON	ERS: Engineered Resilient Systems 3A5	<p><b>17945</b></p> <p>Engineered Resilient Systems (ERS) Overview - 2015</p> <p>► Dr. Jeffrey Holland, SES, <i>U.S. Army Engineer Research and Development Center</i></p>	<p><b>17870</b></p> <p>Defense Engineering Excellence</p> <p>► Ms. Kristen Baldwin, <i>ODASD, Systems Engineering</i></p> <p><b>*Repeated in Track 4 at 10:15AM on Wednesday, October 28</b></p>	<p><b>17955</b></p> <p>U.S. Air Force Acquisition Challenges and Directions</p> <p>► Mr. Jeff Stanley, <i>SAF-AQ</i></p>
TRACK 6	KORMAN	Environment, Safety, and Occupational Health 3A6	<p><b>17871</b></p> <p>OASD(EI&amp;E) Environment, Safety, and Occupational Health (ESOH) in Acquisition Overview</p> <p>► Mr. David Asiello, <i>OASD, Energy, Installations, and Environment</i></p>	<p><b>17855</b></p> <p>Replacement Tanker for United States Air Force - Environment, Safety and Occupational Health Protection Using Systems Engineering</p> <p>► Mr. John Stallings, <i>U.S. Air Force, AFLCMC, KC-46 Program, WKCE</i></p>	<p><b>18065</b></p> <p>NAS411-1 Update - (Toward) Smarter Hazardous Materials Management for Defense Acquisition</p> <p>► Ms. Yvonne Pierce, <i>The Boeing Company</i></p>

9:45AM-10:15AM

Networking Break

Grand Foyer

WEDNESDAY, OCTOBER 28, 2015 - CONTINUED

			10:15AM - 10:50AM	10:50AM - 11:25AM	11:25AM - 12:00PM
TRACK 1	SINGLETON	<b>Systems Engineering Effectiveness</b> 3B1	<u>17918</u> What's in an Effective RAM-C Rationale Report ▶ Mr. Andrew Monje, <i>ODASD, Systems Engineering</i>	<u>17736</u> A Framework for Implementing Systems Engineering Measures at Technical Reviews and Audits ▶ Mr. Christian Orłowski, <i>Northrop Grumman Corporation</i>	<u>17681</u> Applying the New IEEE Systems Engineering Standards to DoD Programs ▶ Mr. Joseph Elm, <i>L-3 Communications</i>
TRACK 2	MILLER	<b>Modeling &amp; Simulation</b> 3B2	<u>17902</u> The Model IS the Design: Keeping the System Model Relevant Throughout the Development Lifecycle ▶ Ms. Stacy Dujardin, <i>Raytheon Company</i>	<u>17891</u> Dynamic Visualization of Complex Systems: Extending the Impact of Model-Based Systems Engineering ▶ Mr. Troy Peterson, <i>Booz Allen Hamilton</i>	<u>17982</u> A Framework for Developing a Digital System Model Taxonomy ▶ Ms. Philomena Zimmerman, <i>ODASD, Systems Engineering</i>
TRACK 3	VON STERNBERG	<b>Systems Security Engineering</b> 3B3	<u>17999</u> Department of Defense (DoD) Joint Federated Assurance Center (JFAC) Update ▶ Mr. Thomas Hurt, <i>ODASD, Systems Engineering</i>	<u>18074</u> Systems Security as a Protection Control Objective ▶ Mr. Michael McEvelley, <i>The MITRE Corporation</i>	<u>17976</u> Systems Security Engineering: A Framework to Protect Hardware Components Down to the Last Tactical Inch ▶ Dr. Brian Cohen, <i>Institute for Defense Analyses</i>
TRACK 4	SELLIER	<b>Better Buying Power/ Affordability</b> 3B4	<u>17870</u> Defense Engineering Excellence ▶ Ms. Kristen Baldwin, <i>ODASD, Systems Engineering</i> <b>*Repeated in Track 5 at 8:35AM on Wednesday, October 28</b>	<u>17856</u> Systems Engineering & Basic Research ▶ Dr. Kathleen Kaplan, <i>Air Force Office of Scientific Research</i>	<u>17877</u> A Systems Engineering Perspective on Enabling Innovation ▶ Col Luke Cropsey, <i>USAF, ODASD, Systems Engineering</i> <b>*Repeated in Track 1 at 4:05PM on Tuesday, October 27</b>
TRACK 5	GIBSON	<b>ERS: Engineered Resilient Systems</b> 3B5	<u>18051</u> Application of ERS to Submarine Design ▶ Dr. Joseph Arcano, <i>Naval Surface Warfare Center, Carderock Division</i>	<u>18050</u> ERS Demonstration: LX(R) Analysis of Alternatives Design Space Exploration ▶ Mr. Adrian Mackenna, <i>Naval Surface Warfare Center, Carderock Division</i>	<u>17884</u> Impact of Modeling and Simulation on Rotorcraft Acquisition ▶ Dr. Marvin Moulton, <i>U.S. Army Research, Development and Engineering Command</i>
TRACK 6	KORMAN	<b>Environment, Safety, and Occupational Health</b> 3B6	<u>18064</u> DoD's REACH Strategy and its Impact to Acquisition ▶ Dr. Patricia Underwood, <i>OASD, Energy, Installations, and Environment</i>	<u>18075</u> REACH Risk Management - An Army Perspective ▶ Mr. George Evans, <i>Prospective Technology, Inc.</i>	<u>18005</u> Air Force Risk Management Approach to the European REACH Regulation ▶ Mr. Kenneth Dormer, <i>Alion Science and Technology</i>

12:00PM - 1:30PM

**Luncheon with Keynote Speaker**

Dr. David Brown, *Deputy Assistant Secretary of Defense, Developmental Test & Evaluation; Director, Test Resource Management Center*

**Hazel Ballroom**

WEDNESDAY, OCTOBER 28, 2015 - CONTINUED

		1:30PM - 2:05PM	2:05PM - 2:40PM	2:40PM - 3:15PM
TRACK 1	SINGLETON	<p><b>18039</b></p> <p>Transition to the Systems Engineering Standards for Defense Programs</p> <p>► Mr. Garry Roedler, <i>Lockheed Martin Corporation</i></p> <p>3C1</p>	<p><b>18036</b></p> <p>The Evolution of SE Standards and Practices – ISO/IEC/IEEE 15288 Based Harmonization</p> <p>► Mr. Garry Roedler, <i>Lockheed Martin Corporation</i></p>	<p><b>18061</b></p> <p>Integrated System and Process Development and Optimization of Design, Performance, Manufacturing, and Lifecycle Cost</p> <p>► RADM John Clarke Orzalli, USN (Ret), <i>Dassault Systèmes Government Solutions</i></p>
TRACK 2	MILLER	<p><b>17830</b></p> <p>Final Report on the Study to Determine the Essential Elements of the Digital System Model</p> <p>► Mr. Jeff Bergenthal, <i>The Johns Hopkins University Applied Physics Laboratory</i></p> <p>3C2</p>	<p><b>18078</b></p> <p>The Digital Thread: What Does it Really Mean and How Can We Understand its Importance in Better Managing Programs Across the Enterprise?</p> <p>► Mr. David Vangeison, <i>Dassault Systèmes Americas Corporation</i></p>	<p><b>17786</b></p> <p>Using Model-Based Systems Engineering as an Adaptive Framework for Improving Cyber Security Testing of Cloud-based Information Systems</p> <p>► Mr. Sung Nguyen, <i>Google</i></p>
TRACK 3	VON STERNBERG	<p><b>17784</b></p> <p>Struggles at the Frontiers of Systems Engineering: Special Focus on Achieving System and Software Assurance for Software-Reliant Systems</p> <p>► Dr. Kenneth Nidiffer, <i>Software Engineering Institute</i></p> <p>3C3</p>	<p><b>17986</b></p> <p>Protecting U.S. Military's Technical Advantage: Assessing the Impact of Compromised Unclassified Controlled Technical Information</p> <p>► Mr. Brian Hughes, <i>ODASD, Systems Engineering</i></p>	<p><b>18006</b></p> <p>Cyber-Physical Systems Security Challenges and Lessons Lived</p> <p>► Mr. Richard Massey, <i>The Boeing Company</i></p>
TRACK 4	SELLIER	<p><b>17888</b></p> <p>Other People's Money: Providing Better Buying Power Through Supplier Innovation</p> <p>► Mr. Christopher Finlay, <i>Raytheon Integrated Defense Systems</i></p> <p>3C4</p>	<p><b>17983</b></p> <p>Modularity and Open Systems – Meaningful Distinctions</p> <p>► Ms. Philomena Zimmerman, <i>ODASD, Systems Engineering</i></p>	<p><b>17997</b></p> <p>Modeling Ground Support Equipment Health for Strategic Procurement and Sustainment of Maintenance Function</p> <p>► Mr. Christopher Guerra, <i>Southwest Research Institute</i></p>
TRACK 5	GIBSON	<p><b>17957</b></p> <p>Engineered Resilient Systems Architecture</p> <p>► Dr. Cary Butler, <i>U.S. Army Engineer Research and Development Center</i></p> <p>3C5</p>	<p><b>17996</b></p> <p>Simulation Support for Early Design of the DDG 1000 Advance Gun System</p> <p>► Mr. Brent Baker, <i>BAE Systems</i></p>	<p><b>17844</b></p> <p>Support of ERS by the DoD HPCMP Computational Research and Engineering Acquisition Tools and Environments (CREATE) Program</p> <p>► Dr. Douglass Post, <i>DoD High Performance Comp, Modernization Program</i></p>
TRACK 6	KORMAN	<p><b>18062</b></p> <p>Advancing System Safety Precepts for Unmanned System</p> <p>► Mr. Mike Demmick, <i>NOSSA</i></p> <p>3C6</p>	<p><b>17872</b></p> <p>Independent Safety Review Boards – A Guide for a Successful Review</p> <p>► Mr. Robert Smith, Jr., <i>Booz Allen Hamilton</i></p>	<p><b>17956</b></p> <p>Joint Munitions Safety Testing</p> <p>► Ms. Diane Dray, <i>Booz Allen Hamilton</i></p>

WEDNESDAY, OCTOBER 28, 2015 - CONTINUED

			3:30PM - 4:05PM	4:05PM - 4:40PM	4:40PM - 5:15PM	5:15PM - 5:50PM
TRACK 1	SINGLETON	<b>Systems Engineering Effectiveness</b> 3D1	<u>18085</u> Putting Engineering Back into Systems Engineering ► Mr. Frank Salvatore, <i>Engility Corporation</i>	<u>18038</u> Taming Intelligence with Specifications – a Systems Engineering Approach ► Mr. Andre Simmons, <i>Booz Allen Hamilton</i>	<u>18076</u> Chart the Path to System Engineering Value ► Mr. William Brothers, <i>Dassault Systèmes Americas Corporation</i>	<u>17968</u> The Importance of the Architect to Lockheed Martin Programs ► Dr. Jeffrey Poulin, <i>Lockheed Martin Corporation</i>
TRACK 2	MILLER	<b>Modeling &amp; Simulation</b> 3D2	<u>18030</u> Tradespace Analysis for Policy: The OpenSEAT Approach ► Mr. Thomas McDermott, <i>Georgia Tech Research Institute</i>	<u>17806</u> Architectural Modeling In SYSML: A Practical Approach to Mapping Functions to Logical Architectural Variants ► Mr. Michael Vinarcik, <i>Booz Allen Hamilton</i>	<u>18080</u> The Application of Systems Modeling in Support of Trade Studies ► Mr. Frank Salvatore, <i>Engility Corporation</i>	
TRACK 3	VON STERNBERG	<b>Systems Security Engineering</b> 3D3	<u>17864</u> The National Cyber Range: A Systems Engineering Resource For Cybersecurity R&D, S&CT, Testing and Training ► Mr. Peter Christensen, <i>OSD AT&amp;L TRMC</i>	<u>17313</u> Developing the Infrastructure and Methodologies for Cyber Security T&E ► Mr. Marty Arnwine, <i>Test Resource Management Center</i>		
TRACK 4	SELLIER	<b>Better Buying Power/ Affordability</b> 3D4	<u>18000</u> Improving Our Leaders' Ability to Understand and Manage Risks, Issues, and Opportunities ► Mr. Ralph DeLuca, <i>DASD, Developmental Test &amp; Evaluation</i>			
TRACK 5	GIBSON	<b>ERS: Engineered Resilient Systems</b> 3D5	<u>17946</u> Large-Scale Tradespace Capabilities ► Dr. Tommer Ender, <i>Georgia Tech Research Institute</i>	<u>17987</u> Engineering Data Visualization Efforts for Engineered Resilient Systems ► Mr. Sebastien Jourdain, <i>Kitware, Inc.</i>	<u>17958</u> Environmental Simulation in Support of Engineered Resilient Systems ► Mr. David Richards, <i>U.S. Army Engineer Research and Development Center</i>	<u>17822 (Panel)</u> Next Generation 463L Cargo Pallet ► <b>Moderator:</b> Mr. Clay Mims, <i>AFLCMC/WNZ</i> ► Ms. Carol Hernandez, <i>AFLCMC/WNZ</i>
TRACK 6	KORMAN	<b>Environment, Safety, and Occupational Health</b> 3D6	<u>17803</u> Software Safety Functionality Hazard Assessment ► Mr. Stuart Whitford, <i>Booz Allen Hamilton</i>	<u>18035</u> Environmental Liabilities for DoD Weapons Systems ► Ms. Trish Huheey, <i>Department of Defense</i>	<u>18027</u> Building on the Syrian Chemical Weapon Destruction Acquisition Success Story ► Mr. Jerry Linn, <i>Joint Project Manager for Elimination</i>	

THURSDAY, OCTOBER 29, 2015

7:00AM-5:50PM

Registration

7:00AM-8:00AM

Networking Breakfast

Grand Foyer

		8:00AM - 8:35AM	8:35AM - 9:10AM	9:10AM - 9:45AM
TRACK 1	SINGLETON	<p><b>Architecture</b></p> <p><u>17909</u> Open Architecture Virtual Integration Process ▶ Dr. Steve Vestal, <i>Adventium Labs</i></p> <p>4A1</p>	<p><u>17988</u> Joint Common Architecture (JCA) Demonstration Architecture Centric Virtual Integration Process (ACVIP) Shadow Effort ▶ Mr. Alex Boydston, <i>United States Army</i></p>	<p><u>18024</u> Building Agility into an Architecting – Fundamental Guidance for Architecting &amp; Architects ▶ Mr. Michael Coughenour, <i>Lockheed Martin Corporation</i></p>
TRACK 2	MILLER	<p><b>Modeling &amp; Simulation</b></p> <p><u>17895</u> A Model Program: Lessons Learned from Model Driven Design Throughout the Program Life Cycle ▶ Mr. Ji Li, <i>Raytheon Company</i></p> <p>4A2</p>	<p><u>17837</u> Transforming Systems Engineering through a Holistic Approach to Model-Centric Systems Engineering ▶ Dr. Mark Blackburn, <i>Stevens Institute of Technology</i></p>	<p><u>17854</u> Achieving MBSE Benefits amidst Multiple Government Program Office System of System Challenges ▶ Mr. John Tyreman, <i>Lockheed Martin Corporation</i></p>
TRACK 3	VON STERNBERG	<p><b>Agile in Systems Engineering</b></p> <p><u>17896</u> Architecture in Agile Delivery ▶ Mrs. Jaya Kathuria, <i>Department of Homeland Security, U.S. Citizenship and Immigration Services</i></p> <p>4A3</p>	<p><u>18017</u> Making the Impossible Possible: Engineering Highly Sophisticated Systems with Agility ▶ Mr. Paul Walker, <i>Lockheed Martin Corporation</i></p>	<p><u>17838</u> Agile Acquisition of Defense Business Systems using the DoD 5000 ▶ Dr. Raj Iyer, <i>Deloitte Consulting, LLP</i></p>
TRACK 4	SELLER	<p><b>Better Buying Power/ Affordability</b></p> <p><u>18026</u> Semantic Architecture for Early Stage Defense Capability Planning Analysis Based on JCIDS Artifacts ▶ Mr. Allen Moulton, <i>MIT Sociotechnical Systems Research Center</i></p> <p>4A4</p>	<p><u>18057</u> Achieving Higher Value in More Affordable Systems ▶ Mr. Robert Scheurer, <i>The Boeing Company</i></p>	<p><u>18071</u> Considering “Should Cost” with Structured Requirements ▶ Mr. Brian Nielsen, <i>The Boeing Company</i></p>
TRACK 5	GIBSON	<p><b>ERS: Engineered Resilient Systems</b></p> <p><u>17954 (Panel)</u> Engineered Resilient Systems (ERS) Industry Panel Discussion ▶ <b>Moderator:</b> Dr. Owen Eslinger, <i>U.S. Army Engineer Research and Development Center</i> ▶ Col(S) K. Colin Turner, <i>USAF, SAF-AQ</i> ▶ Mr. Al Coit, <i>Systems Design &amp; Performance Engineering</i> ▶ Mr. Clif Davies, <i>Lockheed Martin Aeronautics, Advanced Development Programs</i></p> <p>4A5</p>		
TRACK 6	KORMAN	<p><b>Environment, Safety, and Occupational Health</b></p> <p><u>18025</u> Proposed ISO 45001 Occupational Health and Safety Management System Standard – Development Status Update and Potential Impacts to DoD OHS Management Programs ▶ Mr. Kenneth Clayman, <i>Booz Allen Hamilton</i></p> <p>4A6</p>	<p><u>17867</u> DoD-AIA Working Group’s Progress on NAS 411-1, Hazardous Material Target List Update ▶ Ms. Karen Gill, <i>Booz Allen Hamilton</i></p>	<p><u>18001</u> ESOH Risk Management for Fielded Systems ▶ Mr. Sherman Forbes, <i>SAF/AQRE</i></p>

9:45AM - 10:15AM

Networking Break

Grand Foyer

THURSDAY, OCTOBER 29, 2015 - CONTINUED

			10:15AM - 10:50AM	10:50AM - 11:25AM	11:25AM - 12:00PM
TRACK 1	SINGLETON	Architecture 4B1	<p><u>17311</u></p> <p>Systems Engineering and the New JCIDS Process</p> <p>► Mr. William Decker, <i>Defense Acquisition University</i></p>	<p><u>17860</u></p> <p>An Architecture-based Enterprise Planning Process: Enabling More Effective SOS Integration and Enterprise Transformation</p> <p>► Dr. James Martin, <i>The Aerospace Corporation</i></p>	<p><u>17859</u></p> <p>Architecture Definition – A New Process in the ISO International Systems Engineering Standard</p> <p>► Dr. James Martin, <i>The Aerospace Corporation</i></p>
TRACK 2	MILLER	Modeling & Simulation 4B2	<p><u>18022</u></p> <p>Developing and Distributing a CubeSat Model-Based Systems Engineering (MBSE) Reference Model – Status</p> <p>► Dr. David Kaslow, <i>S.E.L.F.</i></p>	<p><u>17857</u></p> <p>The Value of Model-Based Systems Engineering</p> <p>► Mr. Mark Simons, <i>The MITRE Corporation</i></p>	<p><u>18043</u></p> <p>Using Modeling and Simulation for Space Launch System Development</p> <p>► Dr. John Hanson, <i>NASA Marshall Space Flight Center</i></p>
TRACK 3	VON STERNBERG	Agile in Systems Engineering 4B3	<p><u>18033</u></p> <p>Agile Genome Model: How Much Can Agile Techniques Benefit Acquisition Programs?</p> <p>► Mr. Firas Glaiel, <i>Raytheon Company</i></p>	<p><u>17961</u></p> <p>Integrated Performance Measurement Baseline</p> <p>► Mrs. Robin Yeman, <i>Lockheed Martin Corporation</i></p>	<p><u>17985</u></p> <p>Using Agile/Devops in a Distributed Team Environment</p> <p>► Mr. Rohit Mital, <i>SGT, Inc.</i></p>
TRACK 4	SELLIER	Better Buying Power/ Affordability 4B4	<p><u>17937</u></p> <p>Avoiding Overruns in the Specification of Non-Functional Requirements</p> <p>► Dr. Barry Boehm, <i>University of Southern California</i></p>	<p><u>18034</u></p> <p>Better Buying Power Through the Use of Agile Acquisition Strategies</p> <p>► Dr. Julie DeSot, <i>DeSot Business Solutions, LLC</i></p>	<p><u>18028</u></p> <p>COSYSMO 3.0: Updating Systems Engineering Cost Estimation to Support Affordability</p> <p>► Mr. James Alstad, <i>University of Southern California</i></p>
TRACK 5	GIBSON	Human Systems Integration 4B5	<p><u>17881 (Panel)</u></p> <p>Human Readiness Levels in DoD Acquisition?</p> <p>► <b>Moderator:</b> Mr. Jon Coleman, <i>711 HPW/HP</i></p> <p>► Dr. Christopher Nemeth, CHFP, <i>Applied Research Associates</i></p> <p>► Dr. Michael Miller, <i>Air Force Institute of Technology</i></p> <p>► CDR Hank Phillips, USN, <i>NAWCTSD</i></p> <p>► LCDR Michael O’Neil, USCG, <i>U.S. Coast Guard, Human Systems Integration Division</i></p>		
TRACK 6	KORMAN	Environment, Safety, and Occupational Health 4B6	<p><u>17773</u></p> <p>Pedestrian Safety: Systems Thinking Approach in Transportation CLIOS Era</p> <p>► Mr. Subasish Das, <i>University of Louisiana at Lafayette</i></p>	<p><u>18048</u></p> <p>A Case Study in Multi-tiered Distributed Environmental Compliance Information Management in the Air Force</p> <p>► Mr. Brent Allred, <i>Northrop Grumman Information Systems</i></p>	

12:00PM - 1:15PM

Networking Lunch

Hazel Ballroom

THURSDAY, OCTOBER 29, 2015 - CONTINUED

			1:15PM - 1:50PM	1:50PM - 2:25PM	2:25PM - 3:00PM
TRACK 1	SINGLETON	Architecture 4C1	<p><b>18045</b></p> <p>A Soldier System Engineering Architecture (SSEA) Modeling and Simulation Application</p> <p>► Dr. Joseph McDonnell, <i>Dynamic Animation Systems</i></p>	<p><b>18054</b></p> <p>System of Systems Architecture Approach for Lifecycle Digital Environments</p> <p>► Dr. Marilyn Gaska, <i>Lockheed Martin Corporation</i></p>	<p><b>17908</b></p> <p>Measuring Architecture Effectiveness</p> <p>► Mr. Mike Tinker, <i>BAE Systems</i></p>
TRACK 2	MILLER	Modeling & Simulation 4C2	<p><b>18079</b></p> <p>Understanding Enterprise SE Capabilities and Limitations</p> <p>► Mr. Bill Leep, <i>Dassault Systèmes Americas Corporation</i></p>	<p><b>17848</b></p> <p>The New P-Diagram: The Use of SysML Activity Diagrams to Support Taguchi Methods and Robust Design</p> <p>► Ms. Kate Konczal, <i>ARDEC</i></p>	<p><b>17783</b></p> <p>Using Conceptual Modeling to Implement Model-Based Systems Engineering for Program Capability Analysis and Assessment</p> <p>► Mr. John Daly, <i>DoD Modeling and Simulation Coordination Office</i></p>
TRACK 3	VON STERNBERG	Agile in Systems Engineering 4C3	<p><b>18088</b></p> <p>Knowledge Gained in Agile</p> <p>► Mr. Clint Cole, <i>Raytheon Missile Systems</i></p>	<p><b>18040</b></p> <p>Agile and Incremental Software Development in the Defense Acquisition System</p> <p>► Mr. Sean Brady, <i>ODASD, Systems Engineering</i></p>	
TRACK 4	SELLER	Education & Training 4C4	<p><b>17875</b></p> <p>Understanding the Department of Defense's Engineering Workforce</p> <p>► Mrs. Aileen Sedmak, <i>ODASD, Systems Engineering</i></p>	<p><b>17944</b></p> <p>Revised Science and Technology Management Curriculum's Impact on Systems Engineers</p> <p>► Mr. William Decker, <i>Defense Acquisition University</i></p>	<p><b>18032</b></p> <p>Professional Societies as a Source of Systems Engineering Education</p> <p>► Ms. Courtney Wright, <i>INCOSE</i></p>
TRACK 5	GIBSON	Human Systems Integration 4C5	<p><b>17894</b></p> <p>Air Force Human Systems Integration – Capabilities and Requirements Tool</p> <p>► Mr. J. Mark Coleman, <i>U.S. Air Force AFMC AFRL 711th HPW/HP</i></p>	<p><b>18041</b></p> <p>Common User Interaction Guide: More than Just Another Style Guide</p> <p>► Ms. Ariana Kiken, <i>Pacific Science &amp; Engineering</i></p>	<p><b>18044</b></p> <p>Distributed Soldier Representation: M&amp;S Representations of the Human Dimensions of the Soldier</p> <p>► Dr. Joseph McDonnell, <i>Dynamic Animation Systems</i></p>
TRACK 6	KORMAN	Software Engineering 4C6	<p><b>17964</b></p> <p>Developing an Effective Software Product Architecture Using Systematic Software Engineering Practices</p> <p>► Mr. Richard Schmidt, <i>Strategic Insight</i></p>	<p><b>18012</b></p> <p>Methodology for Capturing and Managing the Lifecycle of a Software Issue in a MBSE Tool</p> <p>► Mr. Daniel Hettema, <i>SPEC Innovations</i></p>	

3:00PM - 3:30PM

Networking Break

Grand Foyer

THURSDAY, OCTOBER 29, 2015 - CONTINUED

			3:30PM - 4:05PM	4:05PM - 4:40PM	4:40PM - 5:15PM	5:15PM - 5:50PM
TRACK 1	SINGLETON	Architecture 4D1	<p><b>17981</b></p> <p>A Human View Methodology to Address Stakeholder HSI Concerns</p> <p>► Dr. Holly Handley, <i>Old Dominion University</i></p>	<p><b>18029</b></p> <p>A Flexible Architecture to Repurpose a Deployed System</p> <p>► Mr. Nick Labrecque, <i>The Johns Hopkins University</i></p>		
TRACK 2	MILLER	Modeling & Simulation 4D2	<p><b>18015</b></p> <p>What is a Model? Understanding the First Word in MBSE</p> <p>► Dr. Steven Dam, <i>SPEC Innovations</i></p>	<p><b>17905</b></p> <p>Using Conceptual MBSE to Increase the Effectiveness of System Acquisition</p> <p>► Mr. Oliver Hoehne, <i>Parsons Brinckerhoff</i></p>	<p><b>17890</b></p> <p>Modeling the Essence of Systems</p> <p>► Mr. Troy Peterson, <i>Booz Allen Hamilton</i></p>	
TRACK 3	VON STERNBERG	Enterprise Health Management, Prognostics, Diagnostics, and Reliability 4D3	<p><b>17899</b></p> <p>Attention Focusing Processor for Enterprise Health Management</p> <p>► Dr. James Kraiman, <i>Raytheon Integrated Defense Systems</i></p>	<p><b>17900</b></p> <p>A System Engineering Reliability Study using 2004-2008 Military Attack Aircraft Failure Maintenance Data</p> <p>► Mr. Joseph Brady, <i>George Washington University</i></p>		
TRACK 4	SELLER	Education & Training 4D4	<p><b>17821</b></p> <p>The Evolution Path to Version 0.75 of the Proposed INCOSE Competency Framework</p> <p>► Dr. Don Gelosh, <i>Worcester Polytechnic Institute</i></p>	<p><b>17849</b></p> <p>Some Reflections on the Delivery: A Massive Open Online Course (MOOC) in Systems Engineering</p> <p>► Dr. Michael Ryan, <i>Capability Systems Centre</i></p>	<p><b>18023</b></p> <p>Experience-Based Training; Accelerating the Growth of Systems Engineers</p> <p>► Mr. Michael Coughenour, <i>Lockheed Martin Corporation</i></p>	<p><b>18087</b></p> <p>Flexible and Intelligent Learning Architectures for SoS (FILA-SoS)</p> <p>► Dr. Cihan Dagli, <i>Missouri University of Science &amp; Technology</i></p>
TRACK 5	GIBSON	Human Systems Integration 4D5	<p><b>18053</b></p> <p>Moving HSI to the Left: Defining Pre-Acquisition Activities in the Human Systems Integration Framework (HSIF)</p> <p>► Dr. Matthew Risser, <i>Pacific Science &amp; Engineering Group</i></p>			

5:50PM

Adjourn Conference

**ADDITIONAL AUTHORS**

17313	Mr. Bernard “Chip” Ferguson	17959	Dr. Dave Bell	18028	Dr. Barry Boehm
17681	Mr. Garry Roedler	17966	Dr. Charles Lloyd		Dr. Jo Ann Lane
17773	Dr. Xiaoduan Sun		Ms. Emily Novak		Dr. Garry Roedler
17783	Mr. Bob Brents		Mr. Timothy Schuler		Dr. Marilee Wheaton
	Dr. Jerry Couretas	17976	Dr. Tracee Gilbert	18029	Mr. Ryan Cathcart
17786	Dr. Tom Holzer		Ms. Catherine Ortiz		Dr. William Cottrell
	Dr. Shahryar Sarkani		Mr. Sydney Pope		Mrs. Maggie Gabriello
17822	Ms. Carol Hernandez		Mr. Huan Zhang		Mrs. Amanda McNamar
17837	Dr. Mary Bone	17979	Mr. David Blackstone	18030	Mr. Nicholas Bollweg
	Dr. Robert Cloutier		Mr. David Farren		Dr. Tommer Ender
	Mr. Eirik Hole		Mr. Andrew Gadbois		Mr. Dane Freeman
	Dr. Gary Witus		Mr. Ryan Nichols	18032	Mr. Jason Sohlke
17844	Dr. John D’Angelo	17981	Dr. Beverly Knapp	18038	Mr. Danford Deakin
	Dr. Saikat Dey	17982	Dr. Tyesia Alexander	18040	Dr. Scott Brown
	Dr. Robert Meakin		Dr. Tracee Gilbert	18041	Dr. Matthew Risser
	Dr. Richard Vogel song		Ms. Andrea Lora	18042	Dr. Forrest Shull
17847	Mr. Randall Case		Mr. Frank Salvatore	18044	Mr. Clayton Burford
	Dr. Christopher Eck	17983	Ms. Vanessa Chioffi		Mr. Manuel Diego
	Mr. Gangadhar Ganga		Ms. Monique Ofori		Mr. Derrick Franceschini
	Mr. Stephen Marra	17987	Dr. Patrick O’Leary		Mr. Gary Smith
17848	Mr. Michael Vinarcik	17988	Dr. Peter Feiler	18045	Mr. Robert Auer
17850	Dr. Michael Ryan		Mr. Bruce Lewis		Mr. Clayton Burford
17854	Mr. Rich Byers		Dr. Steven Vestal		Mr. Scott Gallant
17864	Mr. Paul Kettrick	17994	Mr. Dennis Anderson		Mr. Christopher Metevier
	Ms. Elizabeth Messerschmidt		Ms. Tamara Brown	18047	Dr. Tracey Beauchat
	Mr. Doug Troester	17996	Mr. William Sexton, III		COL Robert Kewley, USA
17884	Mr. Charles Williams		Mr. Chris Wentland		Mr. Christopher McGroarty
17886	Mr. Kendall Pond	17998	Ms. Emaan Osman	18048	Mr. Frank Castaneda
	Mr. Garrett Thurston	17999	Ms. Kristen Baldwin	18051	Mr. Adrian Mackenna
17888	Mr. Mike Anderson		Mr. Robert Gold		Dr. Morgan Parker
	Ms. Stacy Dujardin	18006	Mr. Greg Smith	18053	Dr. William Kosnik
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	Dr. William Kosnik		Mr. Scott Gallant	18054	Mr. Joseph Bobinis
	Mr. Arpan Patel		Mr. John Rutledge		Mr. Vincent Galluzzo
	Mr. John Plaga	18010	Dr. Laura Freeman	18056	Mr. Philip Little
	Mrs. Jessica Shihady	18012	Dr. Steven Dam		Mr. Chris Walter
17895	Mr. Nathan Haveman	18014	Mr. Christopher Ritter	18058	Dr. Steven Doskey
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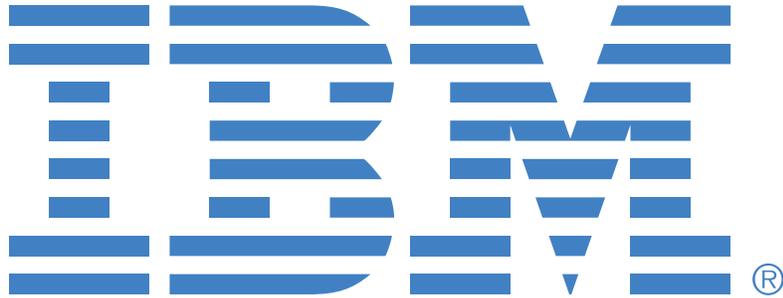
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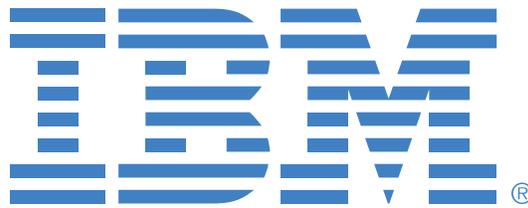






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