PROGRAM

The symposium will be held at the Monterey Marriott, 350 Calle Principal, Monterey, CA

TUESDAY, APRIL 25, 2017

3:00 PM - 5:00 PM

  Pre-Registration

WEDNESDAY, APRIL 26, 2017

7:00 AM - 8:00 AM

  Registration

8:00 AM - 9:15 AM

  Welcome and Keynote Speaker
Dr. Keith F. Snider, Professor, Principal Investigator, Acquisition Research Program

Ronald A. Route, VADM, USN (Ret.), President, Naval Postgraduate School

Keynote: Dr. Richard Carlin, Head, Sea Warfare and Weapons Department, Office of Naval Research

9:15 AM - 9:30 AM

Break

9:30 AM - 11:00 AM

Plenary: The 809 Panel. Reviewing the Regulatory and Legislative Framework to Improve the Efficiency and Effectiveness of Defense Acquisition

The presentation will discuss the framing assumptions of the 809 Panel, early panel findings, and areas for further research.

Chair: Moshe Schwartz, Executive Director, 809 Panel

The 809 Panel: A Framework for Acquisition Reform

- Moshe Schwartz, Executive Director, 809 Panel

Current Research Agenda for the 809 Panel and Initial Findings

- Dr. William LaPlante, Commissioner, 809 Panel; Vice President, The MITRE Corporation

Future Research Agenda

- Joseph W. Dyer, VADM USN (Ret.), Commissioner, 809 Panel; Chief Strategy Officer, National Spectrum Consortium

11:00 AM - 11:15 AM

Break

11:15 AM - 12:45 PM
<table>
<thead>
<tr>
<th>Panel #2: Maximizing Contracting Effectiveness</th>
<th>Panel #3: Improving DoD Software Design and Sustainment</th>
<th>Panel #4: Defense Acquisition after Shocks to the System</th>
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<tbody>
<tr>
<td><strong>Chair</strong>: Elliott Branch, Deputy Assistant Secretary of the Navy, Acquisition and Procurement</td>
<td><strong>Chair</strong>: Rear Admiral John Ailes, USN, Deputy Commander, Fleet Readiness Directorate Space and Naval Warfare Systems Command</td>
<td><strong>Chair</strong>: Todd Harrison, Director of the Defense Budget Analysis, Director, Aerospace Security Project, Center for Strategic and International Studies</td>
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<tr>
<td>Analyzing the Effects of Source Selection Method, Acquisition Type, and Service Component on Acquisition Outcomes</td>
<td>The Policies and Economics of Software Sustainment: DoD's Software Sustainment Ecosystem</td>
<td>Post Milestone B Funding Climate and Cost Growth in Major Defense Acquisition Programs</td>
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</table>
| - Karen Landale, Naval Postgraduate School  
- Rene Rendon, Naval Postgraduate School | - Forrest Shull, Software Engineering Institute  
- Michael McLendon, Software Engineering Institute | - David McNicol, Institute for Defense Analyses |
| - Randall Mora, AVUM, Inc.  
- Wardwell Tom, ASN(RD&A) DASN(AP)  
- Samantha Nangia, ASN(RD&A) DASN(AP)  
- Ryan Dickover, ASN(RD&A) DASN(AP) | - Robert Nord, Carnegie Mellon Software Engineering Institute  
- Forrest Shull, Carnegie Mellon Software Engineering Institute  
- Ipek Ozkaya, Carnegie Mellon Software Engineering Institute | - Andrew Hunter, Center for Strategic and International Studies  
- Gregory Sanders, Center for Strategic and International Studies  
- Rhys McCormick, Center for Strategic and International Studies |
| Customizing the Use of TINA (Truth in Negotiation Act) | Applying the Fundamentals of Quality to Software Acquisition | |
| - Chong Wang, Naval Postgraduate School | - Rick Spiewak, The MITRE Corporation  
- Christine Sweed, The MITRE Corporation  
- David Smiley, D W Smiley LLC  
- Patrick Maurer, The MITRE Corporation  
- Tom Maher, The MITRE Corporation  
- Greg Carrier, The MITRE Corporation  
- Steve Bygren, The MITRE Corporation | |

12:45 PM - 1:45 PM  
**Lunch**  
1:45 PM - 3:15 PM
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<tr>
<td><strong>Chair:</strong> Brigadier General Cameron Holt, USAF, Commander, Air Force Installation Contracting Agency</td>
<td><strong>Chair:</strong> Michael McGrath, Consultant and Senior Technical Advisor, McGrath Analytics LLC</td>
<td><strong>Chair:</strong> Dr. Nancy Spruill, Director, Acquisition Resources &amp; Analysis, OUSD (AT&amp;L)</td>
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</table>
| **Crisis Funded Contracts: Overseas Contingency Operations Contracts after Iraq**  
- Andrew Hunter, Center for Strategic and International Studies  
- Gregory Sanders, Center for Strategic and International Studies | **Accelerating Innovation: From S&T Labs to Acquisition Programs**  
- Venkat Rao, Defense Acquisition University  
- Ravi Thyagarajan, Office of the Chief Scientist, US Army RDECOM-TARDEC  
**Effectively Implementing Policies That Mandate the Use of Technology: A Grounded Theory Study**  
- Elke Drennan, CMU-SEI  
**CREATE: Enabling Innovation with Computational Prototyping and Supercomputing**  
- Douglass Post, DoD High Performance Computing Modernization Program | **Empirical Cost Estimation Tool (PMS 320)**  
- Johnathan Mun, Naval Postgraduate School  
- Thomas Housel, Naval Postgraduate School  
**Estimating the Estimate: Toward a Quick and Inexpensive Method for Weapons System Cost Estimation**  
- Charles Pickar, Naval Postgraduate School  
- Kevin Feely, KCR Business Innovations  
**Determining the Value of a Prototype**  
- Zachary McGregor-Dorsey, Institute for Defense Analyses |
| **Use of Incentives in Performance-Based Logistics Contracting**  
- Andrew Hunter, Center for Strategic and International Studies  
- Jesse Ellman, Center for Strategic and International Studies | **Price Analysis on Defense Logistics Agency (DLA) Contracts**  
- Janie Maddox, Naval Postgraduate School  
- Ralucca Gera, Naval Postgraduate School |

3:15 PM - 3:30 PM

**Break**

3:30 PM - 5:00 PM
Panel #8: Cultivating the Future Acquisition Workforce

Chair: Mark Deskins, Director, Acquisition Career Management, ASN (RDA)

Army Contracting Workforce Organizational Climate Assessment
- Rene Rendon, Naval Postgraduate School
- Edward (Ned) Powley, Naval Postgraduate School

The Defense Acquisition Workforce Challenges with Knowledge, Experience, and Tools
- Su Chang, MITRE
- Colleen Murphy, MITRE
- Adam Bouffard, MITRE

2016 Assessment of the Civilian Acquisition Workforce Personnel Demonstration Project
- Jennifer Lamping Lewis, RAND Corporation
- Cameron Wright, RAND Corporation
- Laura Werber, RAND Corporation
- Jessica Hwang, RAND Corporation
- Lindsay Daugherty, RAND Corporation
- Irina Danescu, RAND Corporation

Panel #9: Enabling Cybersecurity

Chair: Rear Admiral David Lewis, USN, Commander, Space and Naval Warfare Systems Command

Cybersecure Modular Open Architecture Software Systems for Stimulating Innovation
- Walt Scacchi, University of California, Irvine
- Thomas Alspaugh, University of California, Irvine

Security Measurement - Establishing a Confidence that System and Software Security is Sufficient
- Carol Woody, Software Engineering Institute

Decision Support for Cybersecurity Risk Assessment
- Hanan Hibshi, Carnegie Mellon University
- Travis Breaux, Carnegie Mellon University

Panel #10: Thoughts on Management of Complex Systems Acquisition

Chair: Major General Kirk Vollmecke, USA, Program Executive Office for Intelligence, Electronic Warfare & Sensors

A Systems Theoretic-Based Framework to Discover Pathologies in Acquisition System Governance
- Charles Keating, Old Dominion University
- Polinpapilinho Katina, Old Dominion University
- Ra’ed Jaradat, Mississippi State University
- Joseph Bradley, Old Dominion University

Optimal Selection of Organizational Structuring for Complex Systems Development and Acquisitions
- Navindran Davendralingam, Purdue University
- Scott Parrigon, Purdue University
- Sang Eun Woo, Purdue University
- Alexandra Dukes, Purdue University
- Daniel DeLaurentis, Purdue University

A Systems Complexity-based Assessment of Risk in Acquisition and Development Programs
- Roshanak Rose Nilchiani, Stevens Institute of Technology
- Antonio Pugliese, Stevens Institute of Technology

5:00 PM - 6:30 PM
Student Research Poster Show

THURSDAY, APRIL 27, 2017

7:00 AM - 8:00 AM
Registration

8:00 AM - 9:15 AM
Welcome and Keynote Speaker
RADM James B. Greene, USN (Ret.), Chair of Acquisition, Naval Postgraduate School

Keynote: Will be announced shortly

9:15 AM - 9:30 AM
Break

9:30 AM - 11:00 AM

Plenary Panel #11: GAO Observations on DOD’s Weapons Acquisition Portfolio, Requirements, and Acquisition Reform Efforts

Chair: Michael J. Sullivan, Director, Acquisition and Sourcing Management, U.S. Government Accountability Office

GAO Observations on DOD’s Weapons Portfolio: Performance, Reform Implementation, and Use of Knowledge-Based Best Practices

- Desiree Cunningham, Senior Analyst, Acquisition and Sourcing Management, GAO

Early Systems Engineering Positions Programs for Success

- Travis Masters, Assistant Director, Acquisition and Sourcing Management, GAO

Challenges DOD has Attracting Non-Traditional Companies to Modify Their Products for DOD’s Use

- Cheryl K. Andrew, Assistant Director, Acquisition and Sourcing Management, GAO

11:00 AM - 11:15 AM
Break

11:15 AM - 12:45 PM
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<th>Panel #12: Improving Acquisition Workforce Competency</th>
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<td><strong>Chair:</strong> Reuben Pitts, President Lyceum Consulting, LLC</td>
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<tr>
<td><strong>Defense Systems Engineering Career Competency Model Development and Analysis</strong></td>
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<tr>
<td>• Clifford Whitcomb, Naval Postgraduate School</td>
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<td>• Rabia Khan, Naval Postgraduate School</td>
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<td><strong>Team Leader Development Needs and Competencies in the Defense Acquisition Workforce</strong></td>
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<td>• Stephen Trainor, Naval Postgraduate School</td>
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<td><strong>Learning in the Shadows: A Retrospective View (Part II)</strong></td>
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<td>• Donna Seligman, Defense Acquisition University</td>
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<th>Panel #13: Containing Program Lifecycle Costs</th>
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<td><strong>Chair:</strong> Gary Bliss, Director, Performance Assessments and Root Cause Analyses (PARCA), Office of the Assistant Secretary of Defense (Acquisition)</td>
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<td><strong>Discussant:</strong> John Dillard, Senior Lecturer, Naval Postgraduate School</td>
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<td><strong>Application of Should Cost Methodologies to Address Savings Across the Acquisition Life Cycle</strong></td>
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<tr>
<td>• Steve Breitenstein, Air Force Institute of Technology</td>
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<td>• Lt Col E. Jay Kilpatrick, USAF, Air Force Institute of Technology</td>
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<td><strong>Creating a &quot;Should Cost&quot; Culture through Opportunity Management</strong></td>
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<td>• David Riel, Defense Acquisition University</td>
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<th>Panel #14: Informing Future Ship Design Projects</th>
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<tr>
<td><strong>Chair:</strong> Captain Eugene Cash, USN, DDG 1000 Program Office</td>
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<tr>
<td><strong>Flexible and Adaptable Ship Options: Assessing the Future Value of Incorporating Flexible Ships Design Features into New Navy Ship Concepts</strong></td>
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<tr>
<td>• Johnathan Mun, Naval Postgraduate School</td>
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<td>• Thomas Housel, Naval Postgraduate School</td>
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<td>• David Ford, Naval Postgraduate School</td>
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<td><strong>Persistent Platforms? The DDG 51 Case</strong></td>
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<td>• Ira Lewis, Naval Postgraduate School</td>
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<td><strong>Applying Principles of Set-Based Design to Improve Ship Acquisition</strong></td>
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<td>• Eric Rebentisch, Massachusetts Institute of Technology</td>
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<td>• Commander John Genta, USN</td>
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12:45 PM - 1:45 PM
Lunch
1:45 PM - 3:15 PM
Panel #15: Small Business in Defense Acquisition

Chair: Emily Harman, Director, Office of Small Business Programs Department of the Navy

Examining the Effects of Set Aside Policies on Competition and Growth for Small and Mid-Sized Suppliers
- Amanda Girth, The Ohio State University
- Trevor Brown, John Glenn College of Public Affairs, The Ohio State University

Evaluating the Impact of Small Business Set-Asides on Acquisitions Efficiency
- William Lucyshyn, University of Maryland
- John Rigilano, University of Maryland

Exploring Drivers of Better Strategic Sourcing in Air Force Using Analytics
- Aruna Apte, Naval Postgraduate School
- Javier Salmeron, Naval Postgraduate School
- Rene Rendon, Naval Postgraduate School
- Karen Landale, (Lt COL) Air Force

Panel #16: Reducing Life Cycle Costs Through COTS and Additive Manufacturing

Chair: Rear Admiral William Galinis, USN, Program Executive Officer, Ships

Repair-For-Reuse: Increasing Affordability through Cost Savings with Product Lifecycle Management, 3D Laser Scanning Technology, and Additive Manufacturing
- David Ford, Texas A&M University

Using Additive Manufacturing to Mitigate the Risks of Limited Key Ship Components of the Zumwalt-Class Destroyer
- Lieutenant Commander Jim Whitworth, USN

COTS Fresh Look: Use in Major Weapon Systems' Acquisition: Progress, Challenges and Benefits
- Elisabeth Wright, DeVine Consulting

Panel #17: Software Trends and Issues

Chair: Captain Kurt Rothenhaus, USN, PMW-160 Program Manager, Navy Tactical Networks

Software Productivity Trends and Issues
- David Tate, Institute for Defense Analyses

Increasing Quality, Reducing Risk, Time and Expense for Modular Open Architecture Systems
- Nickolas Guertin, Naval Surface Warfare Center, Division Carderock
- Captain Gordon Hunt, USN, Navy Reserve

Decision-Based Inputs for Test and Evaluation Experiments
- Dashi Singham, Naval Postgraduate School

3:15 PM - 3:30 PM
Break
3:30 PM - 5:00 PM
Panel #18: Integrating Program Management and Systems Engineering for Stronger Performance

Chair: Stephen Townsend, Director of Network Programs, Project Management Institute

The Case for Change: The Need for Stronger Engineering Program Performance
- Stephen Townsend, Project Management Institute

Research and the Framework for the Integrating Program Management and Systems Engineering: Methods, Tools, and Organizational Systems for Improving Performance Book
- Eric Rebentisch, Massachusetts Institute of Technology

Integration in Practice Case Studies: FA-18 Super Hornet & F-35 Lightening II
- Betsy Clark, Software Metrics
- Jeffrey Morris, National Security Administration

Panel #19: Innovations in Sustainment

Chair: Lorna Estep, Director of Resource Integration United States Air Force

Making Smart Decisions about Supply Chain Security in the Age of Globalization
- Elizabeth McDaniels, Institute for Defense Analyses
- Catherine J. Ortiz, Defined Business Solutions, LLC
- Brian Cohen, Institute for Defense Analyses

Trends in Performance-Based Contracting
- William Lucyshyn, University of Maryland
- John Rigilano, University of Maryland

FAR Based Crowd Sourcing
- Commander Zachary Staples, USN, Naval Postgraduate School

Panel #20: Trends in International Defense Acquisition

Chair: Dr. Francois Melese, Professor of Economics, Defense Resources Management Institute

Discussant: Dr. Laura Armey, Assistant Professor, Defense Resources Management Institute

Understanding China’s Defense Acquisition System and the Implications for the United States
- Tai Ming Cheung, University of California San Diego

A Systemic Analysis of Military Equipment Acquisition Among NATO Suppliers: A Proof of Concept Based on a Multi-Layered DSS Approach
- Martin Zsifkovits, Universität der Bundeswehr München
- Stefan Pickl, Universität der Bundeswehr München
- Max Krüger, University of Applied Science Furtwangen, Germany
- Dieter Budde, Universität der Bundeswehr München, COMTESSA