

# 9TH ANNUAL SYSTEMS ENGINEERING CONFERENCE

**“Focusing on Improving Performance  
of Defense Systems Programs”**

**Event #7870  
October 23-26, 2006  
San Diego, CA**



Sponsored by the National Defense Industrial Association,  
with Technical Co-Sponsorship by IEEE AES, IEEE Systems  
Council and INCOSE

Supported by the Office of Under Secretary of Defense for  
Acquisition, Technology and Logistics, Director, Systems  
and Software Engineering and Office of the DoD Chief  
Information Officer



# 9TH ANNUAL SYSTEMS ENGINEERING CONFERENCE

October 23 - 26, 2006

## Conference Announcement

A major Conference focusing on improving acquisition and performance of Defense programs and systems, including net-centric operations and data/information interoperability, system-of-systems engineering, and all aspects of system sustainment, will be convened in San Diego, CA, October 23-26, 2006. This Conference is sponsored by the National Defense Industrial Association, Systems Engineering Division, with technical co-sponsorship by IEEE AES, IEEE Systems Council, and the International Council on Systems Engineering, and is supported by the Office of Under Secretary of Defense for Acquisition, Technology and Logistics, Director, Systems and Software Engineering and Office of the DoD Chief Information Officer.

## Conference Objectives

This conference seeks to create an interactive forum for Program Managers, Systems Engineers, Chief Scientists, and engineers and managers from the government, industry, and academic communities whose interests converge on Defense acquisition, from capabilities analysis through disposal. This Conference will provide the opportunity to shape policy and guidance through the exchange of innovative procedures and lessons learned to address the following current issues:

- Interoperability & Systems Integration
- System-of-Systems Engineering
- Life Cycle Systems and Program Management
- Aging Aircraft
- Life Cycles Systems Management
- Sustainment & Upgrade of Legacy Systems
- Application of Government & Industry "Best Practices" Yools, Methodologies & Technologies
- Capability Maturity Model Integration (CMMI)
- Integrated Systems Engineering, Test, & Supportability Disciplines
- Network Centric Operations
- Application of DoD Initiatives:
  - Performance-Based Business Environment
  - System Safety
  - Open Systems
  - Simulation-Based Acquisition
  - COTS Integration
- Systems Engineering Effectiveness
- Modeling & Simulation
- Integrated Risk Management
- Performance Based Logistics
- Improved Cycle Times for Design, Manufacture & Repair Process
- Improved Mission Readiness & Systems Availability
- Systems Engineering Training & Education

## Background

The Department of Defense in undertaking a major transformation of our military capability in response to the new world environment and unforeseen threats. The ability to effect this transformation can only be realized if our Defense systems - space, air, land, sea, and under sea - can effectively satisfy mission area and capability requirements and achieve and sustain a high degree of interoperability, systems integration, systems safety, readiness, and availability. We believe that the greatest opportunity to achieve these objectives for new and legacy systems is through strong technical management embodied in systems engineering methodologies and processes, on the part of both industry and the DoD. Strong emphasis on systems engineering across the full acquisition life cycle, from concept refinement through sustainment, is a key enabler of incremental development and evolutionary acquisition. The Systems Engineering Conference is an annual event targeted at exploring the role of technical planning and execution in Defense programs and systems from a variety of perspectives, academic and pragmatic, by the entire Defense systems engineering community.

## Brochure Contents

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For questions regarding the Conference, please contact : Britt Bommelje, Associate Director, at 703-247-2587 or [bbommelje@ndia.org](mailto:bbommelje@ndia.org).

## Hotel Information

• Hyatt Regency Islandia • • Hyatt Regency Islandia • • Hyatt Regency Islandia •

### Hyatt Regency Islandia

1441 Quivira Road  
San Diego, California 92109  
(619) 224-1234



For more information about hotel and local attractions, please visit the hotel website at: <http://islandia.hyatt.com/hyatt/hotels/index.jsp>.

Please call the hotel directly in order to make your reservation. A block of rooms have been reserved at the Hyatt Regency Islandia. In order to ensure the discounted NDIA rate, you must make your reservations early, and ask for the NDIA room block. Rooms will not be held after Friday, September 29, 2006, and may sell out before then. Rates are also subject to increase after this date. The government per diem rate is available only to active duty or civilian government employees. ID will be required upon check-in. Retired military ID's do not qualify.

**Government Rate:** \$129.00\*

**Industry Rate:** \$169.00

\*(or prevailing government per diem rate at the time of the Conference)

## Registration Information

• Registration Fees • • Registration Fees • • Registration Fees •

	• EARLY • before 8/30/06	• REGULAR • from 8/30/06 to 10/6/06	• LATE • after 10/6/06
Government/Allied/ Academia	\$660	\$725	\$800
Industry NDIA Member	\$775	\$855	\$940
Industry Non- NDIA Member	\$825	\$910	\$1,000

**Tutorial Registration: \$200.00** - This registration is for the MONDAY TUTORIAL SESSION ONLY, and it is IN ADDITION TO the Conference registration fee

To register online for this Conference, please visit the following link: <http://www.ndia.org/meetings/7870>. Online registration will close on October 6, 2006. You must register onsite after this date. You can also download the registration form from the NDIA website or complete the form contained in this brochure. Fax the completed form to 703-522-1885 or mail to Event #7870, National Defense Industrial Association, 2111 Wilson Boulevard, Suite 400, Arlington, VA 22201-3061. Please do not fax or mail registration forms after October 6, 2006. You will need to register onsite after this date. Payment MUST be made at the time of registration. Registrations will not be taken over the phone. For additional questions, contact **Britt Bommelje**, Associate Director at 703-247-2587, or via email at [bbommelje@ndia.org](mailto:bbommelje@ndia.org). Please see page 13 for the Conference Registration form.

**CANCELLATIONS REMINDER:** Cancellations received before August 30, 2006 will receive a full refund. Cancellations received from August 30, 2006 until October 6, 2006 will receive a refund minus a cancellation fee of \$75.00. REFUNDS WILL NOT BE GIVEN FOR CANCELLATIONS RECEIVED AFTER OCTOBER 6, 2006. Substitutions are welcome in lieu of cancellations.

## Displayer Information

• Displayer Information • • Displayer Information • • Displayer Information •

NDIA invites you to display at the 9th Annual Systems Engineering Conference. An area will be available for the set-up of Corporate or Organization displays to demonstrate your company/organization's capability in Systems Engineering and Design expertise, Logistics Support, Systems Engineering and Design Tools, Modeling & Simulation Tools & Capability, expertise in Test & Evaluation, Reliability Analysis Tools & Capability, Process Improvement Capability & Tools including CMMI Appraisal Services & Tools, Engineering Services and related items. Displays will be table-top or "pop-up" style. Allocated display space will be 10 ft wide by 6 ft deep. Pipe and drape is not provided. Please see page 14 for the Display Registration Form.

For additional information on displays, please contact **Britt Bommelje**, at 703-247-2587 or at [bbommelje@ndia.org](mailto:bbommelje@ndia.org).

## General Conference Information

• Conference Information • • Conference Information • • Conference Information •

**Identification Badges** : During Conference registration and check-in, each participant will be issued an identification badge. Please be prepared to present a picture ID. Badges must be worn at all conference functions.

**Conference Proceedings**: Proceedings will be available on the web through the Defense Technical Information Center (DTIC), and will be available two to three weeks after the Conference. You will receive notification via e-mail that proceedings are posted and available on the web.

**Promotional Partnership Opportunities**: Increase your company or organization's exposure at this premier event by becoming a Promotional Partner. A Promotional Partnership will add your company name to the back cover of the on-site brochure as well as main platform recognition throughout the conference, signage at all events including the opening reception, a 350-word organization description in the on-site brochure, and a hotlink from the Conference webpage to your company website. For more information, please contact **Sam Campagna** at 703-247-2544 or via e-mail at [scampagna@ndia.org](mailto:scampagna@ndia.org).

**Attire**: Appropriate dress for this Conference is business casual for civilians and class B uniform for military.

**ADA**: NDIA supports the Americans with Disabilities Act of 1990. Attendees with special needs should call 703-522-1820 and refer to Event # 7870 prior to October 6, 2006.

**National Defense Magazine**: Advertise in National Defense and increase your company's exposure at this Conference! National Defense will be distributed to the attendees of this Conference and all other NDIA Conferences. For more information, please contact **Dino Pignotti** at 703-247-2582 or [dpignotti@ndia.org](mailto:dpignotti@ndia.org).

**Inquiries**: For questions regarding the Conference, please contact **Britt Bommelje**, Associate Director at 703-247-2587 or at [bbommelje@ndia.org](mailto:bbommelje@ndia.org).

For more information on the Conference, or to register online, please visit the Conference website at [www.ndia.org/meetings/7870](http://www.ndia.org/meetings/7870).



# Conference Agenda -- At a Glance

•Sun, October 22, 2006 • • Sun, October 22 • • Sun, October 22 • •Sun, October 22 • • Sun, October

5:00 pm - 7:00 pm

**Registration for Tutorials and General Conference**  
(Tutorials are an additional \$200.00 registration fee)

•Mon, October 23, 2006 • • Mon, October 23 • • Mon, October 23 • •Mon, October 23 • • Mon,

7:00 am - 5:00 pm

**Registration**

7:00 am - 8:00 am

**Continental Breakfast for Tutorial Attendees**  
(Tutorials are an additional \$200.00 registration fee)

8:00 am - 12:00 pm

**Tutorial Tracks**  
(Please refer to page 7 for Tutorial Schedule)

12:00 pm - 1:00 pm

**Buffet Lunch for Tutorial Attendees**

1:00 pm - 5:00 pm

**Tutorial Tracks Continued**

5:00 pm - 6:00 pm  
Regency Annex

**Reception in Display Area (Open to All Participants)**

•Tue, October 24, 2006 • • Tue, October 24 • • Tue, October 24 • •Tue, October 24 • • Tue, October

7:30 am - 5:00 pm

**Registration**

7:30 am - 8:30 am

**Continental Breakfast**

8:30 am - 8:35 am

**Introductions**  
Mr. Sam Campagna, Director, Operations, NDIA

8:35 am - 8:45 am

**Opening Remarks**  
Mr. Bob Rassa, Director, Systems Supportability, Raytheon; Chair,  
Systems Engineering Division, NDIA

8:45 am - 9:45 am

**Keynote Address**  
HON James Finley, Deputy Under Secretary of Defense, Acquisition &  
Technology

9:45 am - 10:15 am

**Break**

10:15 am - 12:00 pm

**Plenary Session : Executive Panel**

**Moderator:**

Mr. Mark Schaeffer, Director, Office of Under Secretary of Defense for  
Acquisition, Technology and Logistics, Director, Systems and Software  
Engineering

**Panelists:**

Mr. Carl Siel, ASN/RDA Chief Engineer (Acting)

Mr. Terry Jagers, SAF/AQ, Director, SAF/AQR (Science, Technology  
& Engineering) (invited)

Mr. Doug Wiltsie, Assistant Deputy for ASM, HQDA, OASA (ALT) (Invited)

Mr. Steven Kapurch, Chief Systems Engineer, NASA (Invited)

**12:00 pm - 1:30 pm**  
**Regency Annex** **Luncheon Awards Ceremony**

**1:30 pm - 5:00 pm** **Concurrent Sessions (Please refer to pages 8-12 for session schedule)**

**5:00 pm - 7:00 pm** **Reception in Display Area**

**• Wed, October 25, 2006 • • Wed, October 25 • • Wed, October 25 • • Wed, October 25 • • Wed,**

**7:00 am - 5:15 pm** **Registration**

**7:00 am - 8:00 am** **Continental Breakfast**

**8:15 am - 12:00 pm** **Concurrent Sessions (Please refer to pages 8-12 for session schedule)**

**12:00 pm - 1:30 pm**  
**Regency Annex** **Luncheon Speaker**  
**Mr. Patrick Michael Kern, Deputy Assistant Secretary of**  
**Defense, NII/DoD CIO for Enterprise Wide Systems Engineering**

**2:30 pm - 5:30 pm** **Concurrent Sessions (Please refer to pages 8-12 for session schedule)**

**• Thurs, October 26, 2006 • • Thurs, October 26 • • Thurs, October 26 • • Thurs, October 26 • • Thurs,**

**7:00 am - 3:00 pm** **Registration**

**7:00 am - 8:00 am** **Continental Breakfast**

**8:00 am - 12:00 pm** **Concurrent Sessions (Please refer to pages 8-12 for session schedule)**

**12:00 pm - 1:00 pm** **Luncheon**

**1:00 pm - 3:00 pm** **Concurrent Sessions (Please refer to pages 8-12 for session schedule)**

**3:00 pm** **Conference Adjourns**

“The Department of Defense finds this event meets the minimum regulatory standards for attendance by DoD employees. This finding does not constitute a blanket approval or endorsement for attendance. Individual DoD component commands or organizations are responsible for approving attendance of its DoD employees based on mission requirements and DoD regulations.”

# Monday, October 23, 2006 - Tutorial Sessions

## 7:00 am Registration & Continental Breakfast

10:15 am - 12:00 pm

Regency A	TRACK 1 Tutorial Session 1A1	Practical Six Sigma Tools for Systems Engineering Mr. Rick Heifer
Regency B	TRACK 2 Tutorial Session 1A2	Requirements Engineering Workshop: A Practical Approach to Modeling and Managing Requirements Mr. William Deibler, II
Regency C	TRACK 3 Tutorial Session 1A3	How to Define Lean Systems Engineering Processes Mr. Tim Olson
Mission A	TRACK 4 Tutorial Session 1A4	What You Need to Know About Chaos, Complexity, and Complex Adaptive Systems to do Systems Engineering Well in the 21st Century Ms. Sarah Sheard
Mission B	TRACK 5 Tutorial Session 1A5	Systems Engineering Applications in Support of the Joint Capabilities Integration and Development System (JCIDS) Mr. Christopher Ryder
Mission C	TRACK 6 Tutorial Session 1A6	Integrated Specification Development Algorithm Mr. Jeffrey Grady
Island A	TRACK 7 Tutorial Session 1A7	System Level Configuration Management Mr. Al Florence
Island B	TRACK 8 Tutorial Session 1A8	QUASAR: A Method for Assessing the Quality of the Architecture of Large and Complex Software-Intensive Systems Mr. Donald Firesmith

1:00 pm - 2:45 pm

TRACK 1 Tutorial Session 1C1	Performance and Reliability Modeling Dr. Meng-Lai Yin
TRACK 2 Tutorial Session 1C2	Integrated Project Management (IPM) – The CMMI and Collaborative Product Development Mr. William Deibler, II
TRACK 3 Tutorial Session 1C3	How to Measurably Improve Your Requirements Mr. Tim Olson
TRACK 4 Tutorial Session 1C4	Leading Effective Technical Reviews and Meetings Mr. David Walden, CSEP
TRACK 5 Tutorial Session 1C5	Improving Systems Engineering Effectiveness Through Assessment and Process Improvement Mr. Ian Talbot
TRACK 6 Tutorial Session 1C6	Integrating Systems Engineering with Earned Value Management Mr. Paul Solomon
TRACK 7 Tutorial Session 1C7	Introduction to SysML & Object Oriented Systems Engineering Methodology (OOSEM) Dr. Abe Mellich
TRACK 8 Tutorial Session 1C8	Acoustic Rapid COTS Insertion and Advanced Processing Build – Integrating Test & Evaluation Philosophies into Systems Engineering Mr. George Maris

3:15 pm - 5:30 pm

TRACK 1 Tutorial Session 1D1	Performance and Reliability Modeling (Continued) Dr. Meng-Lai Yin
TRACK 2 Tutorial Session 1D2	Integrated Project Management (IPM) – The CMMI and Collaborative Product Development (Continued) Mr. William Deibler, II
TRACK 3 Tutorial Session 1D3	How to Measurably Improve Your Requirements (Continued) Mr. Tim Olson
TRACK 4 Tutorial Session 1D4	Leading Effective Technical Reviews and Meetings (Continued) Mr. David Walden, CSEP
TRACK 5 Tutorial Session 1D5	Improving Systems Engineering Effectiveness Through Assessment and Process Improvement (Continued) Mr. Ian Talbot
TRACK 6 Tutorial Session 1D6	Integrating Systems Engineering with Earned Value Management (Continued) Mr. Paul Solomon
TRACK 7 Tutorial Session 1D7	Introduction to SysML & Object Oriented Systems Engineering Methodology (OOSEM) (Continued) Dr. Abe Mellich
TRACK 8 Tutorial Session 1D8	Acoustic Rapid COTS Insertion and Advanced Processing Build – Integrating Test & Evaluation Philosophies into Systems Engineering (Continued) Mr. George Maris

5:30 pm - 6:30 pm Reception in Display Area

## Break

## Buffet Lunch

## Break

# Tuesday, October 24, 2006

1:30 pm - 3:00 pm

Regency A	TRACK 1 Systems Engineering Effectiveness Mr. Al Brown	Defense SE Revitalization – A Work in Progress	Understanding the Technical Rationale and Intent of Requirements
Regency B	Session 2C1 Mr. John Lohse	<b>Mr. Robert Skalamara</b>	<b>Mr. John Chobany</b>
Regency C	TRACK 2 Test & Evaluation in Systems Engineering Mr. John Lohse	Advancing the Role of DT&E in the Systems Engineering Process: An Update on the NDIA Systems Engineering Division DT&E Committee	Assessing Technology Maturity Through Testing
Mission A	Session 2C2	<b>Mr. John Lohse</b>	<b>Mr. Chris DiPetto</b>
Mission B	TRACK 3 Program Management Mr. Bob Lyons	Cost Efficient Risk Management through Integrated T&E throughout the Systems Engineering Life Cycle	A Closer Look at the Housing Bubble and Requirements Management
Mission C	Session 2C3	<b>Mr. Joseph E. Tribble</b>	<b>Mr. Jimmy Thai</b>
Island A	TRACK 4 Integrated Diagnostics Mr. Howard Savage	Energetic Material/Systems Prognostics	Insight: Operability Testing for High Availability Systems
Island B	Session 2C4	<b>Mr. David Han</b>	<b>Mr. Edward Beck</b>
Island C	TRACK 5 Modeling & Simulation Mr. Jim Hollenbach	Implementing the Acquisition M&S Master Plan	Planning M&S Support to Systems Engineering
Island A	Session 2C5	<b>Mr. Fred Myers</b>	<b>Mr. James Hollenbach</b>
Island B	TRACK 6 Net Centric Operations Mr. Jack Zavin	Reference Architectures and the JCIDS Process	Architecture, Requirements, and Software: A Cooperative Approach to Product Management
Island C	Session 2C6	<b>Mr. Clifford Sarmons</b>	<b>Mr. Jonathan Casey</b>
Island A	TRACK 7 Best Practices & Standardization Mr. Paul Croll	How Does High Maturity Benefit the Customer?	CMMI—Next Steps
Island B	Session 2C7	<b>Mr. Rick Hefner</b>	<b>Ms. Kristen Baldwin</b>
Island C	TRACK 8 Software Dr. Tom Christian	A Pragmatic Focus in Managing Subcontractor Performance in a Systems Engineering Services Program Via the CMMI	Early Application of Computer Program Systems Integration, Test and Performance Measurement
Island A	Session 2C8	<b>Dr. Mary Anne Herndon</b>	<b>Mr. Tom Sobieralski</b>

3:30 pm - 5:00 pm

TRACK 1 Systems Engineering Effectiveness Mr. Al Brown	Systems Engineering Used in Venus Satellite Design	Royal Air Force Flyingdales: Space Information and Intelligence System
Session 2D1 Mr. John Lohse	<b>Mr. Jacob Herscovitz</b>	<b>Mr. Dominick Peter Sardella</b>
TRACK 2 Test & Evaluation in Systems Engineering Mr. John Lohse	System Engineers Provide a Key Contribution and Role in System Integration & Test	The Value of Embedded Systems Engineering in Test and Evaluation
Session 2D2	<b>Mr. William Lyders</b>	<b>Parvaneh Safaei</b>
TRACK 3 Program Management Mr. Bob Lyons	Program Support: Perspectives and Systemic Issues	Using a Layered Definition of Capability to Align SE, T&E, and M&S
Session 2D3	<b>Mr. David Castellano</b>	<b>Mr. Jack Sheehan</b>
TRACK 4 Integrated Diagnostics Mr. Howard Savage	Technical Content Sharing within IEDM IETW-IMI Common Operating Environments	Utilizing Current Test Strategies to Drive Diagnostics Development, Deployment and Support Through Software Tools
Session 2D4	<b>Mr. Patrick Young</b>	<b>Mr. Duane Lowenstein</b>
TRACK 5 Modeling & Simulation Mr. Jim Hollenbach	Model-Based Systems Engineering	Model Driven SE and Verification: Linking the “Vee”
Session 2D5	<b>Mr. Dwayne Hardy</b>	<b>Mr. Timothy Tritsch</b>
TRACK 6 Net Centric Operations Mr. Jack Zavin	DoD Enterprise Architecting: Joint Issues Derived From SOF Air Analysis	The Use of Patterns in Enterprise Architecture
Session 2D6	<b>Dr. Robert Mills</b>	<b>Mr. Satya Moorthy</b>
TRACK 7 Best Practices & Standardization Mr. Paul Croll	Value Stream Mapping: Technical Requirements Flow-Down to Suppliers	Implementing a Standardized, Lean and Paperless Change Management Process in a Legacy, Multi-Program Environment
Session 2D7	<b>Santanu Sen</b>	<b>Ms. Robin Lawson</b>
TRACK 8 Software Dr. Tom Christian	The Historical Results and Lessons Learned of a Software Reliability Prediction	How Applying the Team Software Process (TSP) and Personal Software Process (PSP) can increase Software Supportability
Session 2D8	<b>Mr. Jon Peterson</b>	<b>Mr. Timothy Chick</b>

## Break in Display Area

## 5:30 pm - 7:00 pm Reception in Display Area



# Wednesday, October 25, 2006

## 7:00 am Registration & Continental Breakfast

8:00 am - 9:45 am

10:15 am - 12:00 pm

Regency A	TRACK 1 Systems Engineering Effectiveness Mr. Al Brown Session 3A1	Step 1 for Systems Engineering: Establish a Tangible Requirement Management Process <b>Mr. James Miller</b>	The Next Generation of Air Force Systems Engineering: Application of SE to the Early Stages of the Life Cycle <b>Mr. Jeff Loren</b>
Regency B	TRACK 2 Test & Evaluation in Systems Engineering Mr. John Lohse Session 3A2	Applying the Systems Engineering Approach to the Test and Evaluation Process <b>Mr. Raymond Beach</b>	Test and Evaluation Using Virtual Modeling and Simulation <b>Dr. Robert Franceschini</b>
Regency C	TRACK 3 Program Management Mr. Bob Lyons Session 3A3	Numm-McCurdy's Are Not Fun - But - They Are Instructive <b>HON Gary Payton</b>	Acquisitions and Systems Engineering Metrics: Leading Indicators Versus Lagging Indicators <b>Ms. Rebecca Cowen-Hirsch</b>
Mission A	TRACK 4 Integrated Diagnostics Mr. Howard Savage Session 3A4	NDIA Electronics Prognostics Task Results - The E-Prog Technology Roadmap <b>Dr. James Dill</b>	Identifying and Assessing Life Cycle Related Critical Technology Elements (CTEs) for Technology Readiness Assessments (TRAs) <b>Dr. Jay Mandelbaum</b>
Mission B	TRACK 5 Modeling & Simulation Mr. Jim Hollenbach Session 3A5	Modeling and Simulation (M&S) an Issue of Credibility <b>Mr. David Henry</b>	Improving the State of Distributed Simulation <b>Mr. Frank Salvatore</b>
Mission C	TRACK 6 Net Centric Operations Mr. Jack Zavlin Session 3A6	New Perceptions in Coping with System of Systems <b>Dr. Daniel Leshem</b>	"The Net-Centric Foxhole" - Perspectives from Army Future Combat Systems <b>Mr. David Emery</b>
Island A	TRACK 7 Best Practices & Standardization Mr. Paul Croll Session 3A7	Navigating the Forest of Standards <b>Ms. Cynthia Hauer</b>	Defining and Partitioning Best-of-Team Processes in a Multi-Organizational Teaming Environment <b>Mr. David Walden, CSEP</b>
Island B	TRACK 8 Software Dr. Tom Christian Session 3A8	Long-Term Software Support Requires Good Configuration Management <b>Mr. Mark Pellegrini</b>	Solutions Analysis for Helicopter Brownout <b>Lt Col John Colombi, USAF</b>

TRACK 1 Systems Engineering Effectiveness Mr. Al Brown Session 3B1	How to Create and Select High Value, Innovative, Competitive and Economic Concepts for New Systems? <b>Mr. Jacob Herscovitz</b>	Systems Engineering and Integration for Submarine Combat Systems in the COTS Environment <b>Mr. Dennis Cooper</b>
TRACK 2 Test & Evaluation in Systems Engineering Mr. John Lohse Session 3B2	Explosives Safety Testing Requirements <b>Mr. Scott Rideout</b>	Toward Flight Testing Less, Better <b>Mr. Dean Carico</b>
TRACK 3 Program Management Mr. Bob Lyons Session 3B3	Quality/Systems Engineering Interfaces to Enhance Program Success <b>Dr. Jay Mandelbaum</b>	Cost as an Independent Variable <b>Mr. Ed Casey</b>
TRACK 4 Logistics & Supportability Mr. Chuck Silva Session 3B4	Identifying and Assessing Life Cycle Related Critical Technology Elements (CTEs) for Technology Readiness Assessments (TRAs) <b>Dr. Jay Mandelbaum</b>	Update on the Process for Evaluating Logistics Readiness Levels (LRLs) <b>Ms. Elizabeth Broadus</b>
TRACK 5 Modeling & Simulation Mr. Jim Hollenbach Session 3B5	Improving the State of Distributed Simulation <b>Mr. Frank Salvatore</b>	Information Assurance for Distributed M&S Standards <b>Mr. Scott Holben</b>
TRACK 6 Net Centric Operations Mr. Jack Zavlin Session 3B6	"The Net-Centric Foxhole" - Perspectives from Army Future Combat Systems <b>Mr. David Emery</b>	ASW FoS/SoS Acquisition Alignment <b>Mrs. Colleen Cannon</b>
TRACK 7 Best Practices & Standardization Mr. Paul Croll Session 3B7	Defining and Partitioning Best-of-Team Processes in a Multi-Organizational Teaming Environment <b>Mr. David Walden, CSEP</b>	Implementing an Effective Peer Review Process <b>Ms. Jeanne Balsam</b>
TRACK 8 Software Dr. Tom Christian Session 3B8	Solutions Analysis for Helicopter Brownout <b>Lt Col John Colombi, USAF</b>	Integrated Structural Health Monitoring for Aging Aircraft <b>Maj Joerg Walter, USAF</b>

## Break in Display Area

## 12:00 pm Lunch in the Regency Annex

# Wednesday, October 25, 2006

1:30 pm - 3:00 pm

3:30 pm - 5:00 pm

<b>Regency A</b>	TRACK 1 Systems Engineering Effectiveness Mr. Al Brown	Concept for an Enterprise Wide System Engineering Collaborative Engineering Environment	<b>Dr. David Signori, Jr.</b>	<b>Mr. Brian Shaw</b>	Product-Based Systems Engineering Requirements
<b>Regency B</b>	Session 2C1				
	TRACK 2 Systems Engineering Effectiveness Mr. Al Brown	Performance-Based Earned Value®	<b>Mr. Paul Solomon</b>	<b>Mr. James Miller</b>	Implementing Systems Engineering in a Sustainment Environment
	Session 3C2				
<b>Regency C</b>	TRACK 3 Program Management Mr. Bob Lyons	Understanding the Joint Partnership Between Program Management & Systems Engineering on a Multi-Purpose Airlift Program	<b>Mr. Benjamin Luong</b>	<b>SQNLDR Peter Weeding</b>	Lessons Learned From a Mature DIMS/MIS Program (E3)
	Session 3C3				
<b>Mission A</b>	TRACK 4 Logistics & Supportability Mr. Chuck Silva	Defining the Fundamental Framework of an Effective Performance Based Logistics (PBL) Contract	<b>Dr. Dinesh Verma</b>	<b>Mr. Ivan Wolnek</b>	A Common Sense Approach to Component Commonality
	Session 3C4				
<b>Mission B</b>	TRACK 5 Modeling & Simulation Mr. Jim Hollenbach	An Effective UML Process	<b>Mr. Jeffrey Grady</b>	<b>Mr. Robert Slater</b>	Missile Operations & Support Simulation (MOSS) Method
	Session 3C5				
<b>Mission C</b>	TRACK 6 Operations Mr. Jack Zavin	Humans-in-the-Loop – Challenges in a Complex SOS Environment	<b>Dr. Abe Mellich</b>	<b>Dr. Shin-lyh Chang</b>	Capability Acquisition Strategy Analysis: A Real Options Approach
	Session 3C6				
<b>Island A</b>	TRACK 7 Best Practices & Standardization Mr. Paul Croll	Rapidly Defining a Lean CMMI Maturity Level 3 Process	<b>Mr. Zia Turfai</b>	<b>Ms. Kristine Blom</b>	Defining a Lean Configuration Management Process at NASA JPL
	Session 3C7				
<b>Island B</b>	TRACK 8 Software Mr. John Pavlos	A Second Life for the OHIO Class Ballistic Missile Submarine: Facilitating Future Multi-Mission Capability for the SSGN	<b>Mr. John Pavlos</b>	<b>Mr. Adam McCorkle</b>	Lessons Learned with Integration of Federated Systems on Legacy Aircraft
	Session 3C8				

## Break in Display Area

TRACK 1 Systems Engineering Effectiveness Mr. Al Brown	Systems Engineering for Rapid Prototyping: A Practical Application	Mr. Al Brown
Session 3D1		
TRACK 2 Systems Engineering Effectiveness Mr. Al Brown	Suitable Metrics for Measuring the Effectiveness of the Systems Engineering Process	Mr. Al Brown
Session 3D2		
TRACK 3 Program Management Mr. Bob Lyons	Seven Steps of an Effective Lessons-Learned Process	Mr. Bob Lyons
Session 3D3		
TRACK 4 Logistics & Supportability Mr. Chuck Silva	GEIA-STD-0007 Logistics Product Data - Data Exchange using GEIA and ISO Standards (Revitalizing the LSAR)	Mr. Chuck Silva
Session 3D4		
TRACK 5 Modeling & Simulation Mr. Jim Hollenbach	Analysis, Interaction, Modeling and Simulation Framework	Mr. Jim Hollenbach
Session 3D5		
TRACK 6 Operations Mr. Jack Zavin	Open Architecture as an Enabler for FORCEnet	Mr. Jack Zavin
Session 3D6		
TRACK 7 Best Practices & Standardization Mr. Paul Croll	IGEIA-927 Common Data Schema for Complex Systems. (A Harmonization of US and ISO Data Standards)	Mr. Paul Croll
Session 3D7		
TRACK 8 Software Mr. John Pavlos	The System Safety Basis for DoD's Emerging Contaminants Program	Mr. John Pavlos
Session 3D8		
TRACK 1 Systems Engineering Effectiveness Mr. Al Brown	Bridging Systems Engineering and Systems Sciences – Moving Systems Engineering into the Third Millennium	Mr. Al Brown
Session 3D1		
TRACK 2 Systems Engineering Effectiveness Mr. Al Brown	A New Strategy for Submarine Payload Integration – The VIRGINIA Multi-Mission Module	Mr. Al Brown
Session 3D2		
TRACK 3 Program Management Mr. Bob Lyons	Certification of Flight Critical Systems	Mr. Bob Lyons
Session 3D3		
TRACK 4 Logistics & Supportability Mr. Chuck Silva	Technical Data (an output of Systems Engineering) in the LCMC Concept	Mr. Chuck Silva
Session 3D4		
TRACK 5 Modeling & Simulation Mr. Jim Hollenbach	Interactive Visualization Development For Rapid Response	Mr. Jim Hollenbach
Session 3D5		
TRACK 6 Operations Mr. Jack Zavin	FORCEnet Implications for Naval Coalition Forces	Mr. Jack Zavin
Session 3D6		
TRACK 7 Best Practices & Standardization Mr. Paul Croll	Optimizing Risk Management	Mr. Paul Croll
Session 3D7		
TRACK 8 Software Mr. John Pavlos	Anti-Tamper Executive Agent	Mr. John Pavlos
Session 3D8		

TBD

# Thursday, October 26, 2006

## 7:00 am Registration & Continental Breakfast

10:15 am - 12:00 pm

TRACK 1 Systems Engineering Effectiveness	Adapting the Vee Model to Accomplish Systems Engineering on Change Projects	Advances in Systems Engineering Measurement: Building Insight into Program Performance
Mr. Al Brown Session 4B1	<b>Ms. Lauren Nguyen</b>	<b>Mr. Garry Roedler</b>
TRACK 2 Systems Engineering Effectiveness	Integrating Environment, Safety, and Occupational Health Risk Management into Systems Engineering using the System Safety Methodology	Handbook on Engineering for System Assurance
Mr. Al Brown Session 4B2	<b>Mr. Sherman Forbes</b>	<b>Ms. Kristen Baldwin</b>
TRACK 3 Program Management	Problem Reporting is not a Problem, It's an Opportunity	Fostering Intra-Organizational Communication of Enterprise Systems Engineering Practices
Mr. Bob Lyons Session 4B3	<b>Mr. Scott Banks</b>	<b>Dr. Brian White</b>
TRACK 4 Education & Training	Introducing Object Oriented Systems Engineering Methods in University Systems Engineering Curricula	Systems Engineering at Naval Postgraduate School
Session 4B4	<b>Mr. Christopher Ryder</b>	<b>Dr. Eugene Paulo</b>
TRACK 5 Modeling & Simulation	"Training" for Models: The Role of Knowledge Management in Applying M&S to Systems Engineering	A Predictive Model of User Page Costs for Future Air Traffic Services and Capabilities: An Automatic Dependent Surveillance - Broadcast Example
Mr. Jim Hollenbach Session 4B5	<b>Dr. Robert Franceschini</b>	<b>Mr. Kent Hollinger</b>
TRACK 6 Net Centric Operations	Strategies for Moving Beyond the Simple Network Management Protocol (SNMP)	Hypothetical Military CONOP for Wireless Sensor Networks
Mr. Jack Zavin Session 4B6	<b>Mr. Sam Omar</b>	<b>Mr. David Stuart</b>
TRACK 7 Best Practices & Standardization	A Quest for Practical Design-for-Six-Sigma (DFSS) Tools - PGMM Case Study	Pattern Library for Use in Weapons System Engineering
Mr. Paul Croll Session 4B7	<b>Mr. Douglas Storsved</b>	<b>Mr. Frank Salvatore</b>
TRACK 8		
Session 4B8		

## Break in Display Area

8:00 am - 9:45 am

TRACK 1 Systems Engineering Effectiveness	Improving the Systems Engineering Process Through Value Stream Mapping	Knowledge Management (KM) and Risk Assessment (RA) Trusted Integrated Framework
Mr. Al Brown Session 4A1	<b>Mr. Brent Theodore</b>	<b>Mr. John Coughlin</b>
TRACK 2 Systems Engineering Effectiveness	Proposed Safety Precepts and Safety Design Guidance for Unmanned Systems	Proposed Safety Precepts and Safety Design Guidance for Unmanned Systems (Continued)
Mr. Al Brown Session 4A2	<b>Mr. Edward Kratovil</b>	<b>Mr. Edward Kratovil</b>
TRACK 3 Program Management	Specifying Initial Design Review (IDR) and Final Design Review (FDR) Criteria	Technology Program Management Model (TPMM): A Systems-Engineering Approach to Technology Development Program Management
Mr. Bob Lyons Session 4A3	<b>Ms. Mary Ann Lapham</b>	<b>Mr. Jeffrey Craver</b>
TRACK 4 Education & Training	Strategies for Systems Engineering Training	Comprehensive Training for Your Engineering Workforce
Session 4A4	<b>Dr. Rick Hefner</b>	<b>Mr. Michael Kutch, Jr.</b>
TRACK 5 Modeling & Simulation	A Model-Driven Systems Engineering Approach for Unmanned Aircraft Air-space Integration	How the Modeling and Simulation Product Line Approach Supports Concept Exploration
Mr. Jim Hollenbach Session 4A5	<b>Mr. Joseph Wolfrom</b>	<b>Dr. Robert Franceschini</b>
TRACK 6 Net Centric Operations	Acquiring Evolving Technologies: Web Services Standards	Leveraging Open Source e-Commerce Tools to Enable Joint Operations
Mr. Jack Zavin Session 4A6	<b>Mr. Harry Levinson</b>	<b>Mr. Steve Rowe</b>
TRACK 7 Best Practices & Standardization	Mission Assurance Within the Framework of CMMI	RoHS and WEEE - How Will DoD Programs Manage the Lead-Free Transition?
Mr. Paul Croll Session 4A7	<b>Ms. Kathleen Stone</b>	<b>Mr. Vance Anderson</b>
TRACK 8		
Session 4A8		

## 12:00 pm Lunch in the Regency Annex

# Thursday, October 26, 2006

1:30 pm - 3:00 pm

## Conference Adjourns

Regency A	<p>TRACK 1 Systems Engineering Effectiveness Mr. Al Brown</p> <p>Statistical Design Process for System Engineering Turbo Tax for CMMI® - The Sequel</p> <p>Session 4C1 <b>Dr. William Thomas</b></p> <p>TRACK 2 Test &amp; Evaluation in Systems Engineering Mr. Al Brown</p> <p>Engineering Practices for System Assurance Getting Started With Measuring Your Security</p> <p>Session 4C2 <b>Mr. Paul Croll</b></p> <p>TRACK 3 Program Management Mr. Bob Lyons</p> <p>Effective QA on Small Projects Systems Management: Can It Help Forecast Future Program Performance?</p> <p>Session 4C3 <b>Ms. Jean Swank</b></p> <p>TRACK 4 Education &amp; Training</p> <p>Continuous Learning Module – M&amp;S for Systems Engineering</p> <p>Session 4C4 <b>Mr. Michael Truelove</b></p> <p>TRACK 5 Modeling &amp; Simulation Mr. Jim Hollenbach</p> <p>A Supply Chain Simulation for Program Managers in Manufacturing</p> <p>Session 4C5 <b>Mr. Swee Leong</b></p> <p>TRACK 6 Net Centric Operations Mr. Jack Zavin</p> <p>An Industry Situational Assessment of the Current Maturity of Data Standards, Processes and Infrastructure to Implement a Net-Centric Information Systems Common Data Environment</p> <p>Session 4C6 <b>Mr. Dick Engwall</b></p> <p>TRACK 7 Best Practices &amp; Standardization Mr. Paul Croll</p> <p>Extending the Team Software Process (TSP) for Systems Engineering</p> <p>Session 4C7 <b>Mr. Dennis Linck</b></p> <p>TRACK 8</p> <p>Implementations of the STEP Systems Engineering Standard (AP233)</p> <p>Session 4C8 <b>Mr. James U'Ren</b></p>	<p>Risk Management Process Improvements on the Global Hawk Program</p> <p><b>Mr. Doug Atkinson</b></p> <p>Horizontal Integration of ESOH Requirements within the Program Management Office for Future Combat Systems (Brigade Combat Team)</p> <p><b>Ms. Elizabeth Miller</b></p>
Regency B		
Regency C		
Mission A		
Mission B		
Mission C		
Island A		
Island B		

9th Annual Systems Engineering Conference  
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**Questions?** Contact Britt Bommelje, Associate Director  
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