

Abstracts (cont.)

Al Hoheb, The Aerospace Corporation

The Smarter Buyer 2 Course – Managing Program Executability

The Smarter Buyer 2 (SB2) course is a follow-on to the original, Smarter Buyer course that provided government acquisition executives and program managers information on how industry uses financial measures to manage their space business. Both Smarter Buyer courses are enriched by interviews, tutorials, current data, analysis, and examples. Both have specific take-aways and provide suggested accountabilities. This talk on Smarter Buyer 2 will explain the course goals and key concepts including: understanding the acquisition environment and the set of program executability expectations, how to incentivize industry, defining an executable program plan by defining baselines, assessing program executability and risk, establishing and managing risk reserve, the role of mission assurance, making execution decisions, and communicating program executability with transparency and unity of purpose across stake holders. The course addresses key systems engineering concepts; enterprise architecting and technology maturity, incremental system development, systems engineering as part of an overarching mission assurance framework, and day-to-day systems engineering activities necessary to ensure executability.

Scott Jackson , University of Southern California

System Resilience: Capabilities, Culture and Infrastructure

System resilience is the attribute of human-made systems that makes them unlikely to experience catastrophic failures. Challenger, Columbia, Chernobyl and Bho-pal are examples of such failures. System resilience goes beyond traditional disciplines, such as reliability and system safety to achieve its goal. System resilience employs systems engineering principles at product and infrastructure levels. The infrastructure system includes such nodes as the developer, the customer, the user, the maintainer, and the operator. System resilience requires that systems engineering principles be practiced across organizational boundaries and to a greater level of detail than is common in today's world. System resilience depends on developing beneficial paradigms within all nodes of the infrastructure. Finally, system resilience requires that all nodes of the infrastructure system have a set of capabilities that are directly derivable from root causes of catastrophes. The combination of capabilities, culture and infrastructure forms the basic framework of system resilience.

Register Online:

<http://www.incose-la.org/mini-conf2007/>

	Before 1/6/07	After 1/6/07	On-site
INCLOSE Member	\$60	\$75	\$85
Non-Member	\$75	\$90	\$100
Non-member w 06-07 membership	\$115	\$130	\$140
Group of 6 or more (per person)	\$60	\$75	N/A
INCLOSE Sr. Member	\$35	\$40	\$50
Full-time students	\$35	\$40	\$50

International Council on Systems Engineering
Los Angeles Chapter

Loyola Marymount University
College of Science and Engineering

National University
School of Engineering and Technology

present:

2007 Mini Conference: Program Executability: Risk, Resilience, and Success through Systems Engineering

Gain insights and new information that you can take with you to improve your and your company's performance in program success, cost reduction, risk analysis, building a resilient organization, and more.



Keynote Speaker

Neil G. Siegel

Sector Vice-President, Technology
Northrop Grumman Mission Systems

Neil Siegel is Sector Vice-President of Technology for the 20,000-person Mission Systems sector within Northrop Grumman.

He has supervised the creation and fielding of successful systems in many domains, including air / missile defense, battle command, Blue-Force Tracking, network-centric warfare, tactical operations centers, integrated security/force protection, commercial information technology, simulation and training, radar, intelligence, unmanned air vehicles, and logistics automation.

January 20, 2007

8AM - 5PM

Loyola Marymount University

1 LMU Drive, Los Angeles



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University



for more information go to
<http://www.incose-la.org/mini-conf2007/>

REGISTRATION

7:30am – Speaker’s Breakfast/Registration/Buffer breakfast

Master of Ceremonies

Dr. William Hatton, Director

Space-Based Surveillance Division, Aerospace Corporation

WELCOME and KEYNOTE

8:30am - Welcome: Conference Chair: Dr. Jack Elson

8:40am - Keynote Speaker: Neil Siegel, Sector Vice President, Technology, Northrop Grumman Mission Systems

FIRST SESSION

9:20am - Program Executability, Dr. David Gorney, V.P., Space Programs Operations, Aerospace Corporation

10:10am – Break

SECOND SESSION

10:30am - 1) The Institutionalization of Experienced-Based Process Improvements: Lessons Learned, Jorg Largent, Lead B-2 Systems Engineer, Northrop Grumman Corporation (Palmdale, CA)

11:00am - 2) Strengthening the Bond between Systems Engineering and Systems Management, Jean Gebman, RAND

11:30am - 3) The Smarter Buyer 2 Course – Managing Program Executability, Mr. Al Hoheb, Principal Engineer, The Aerospace Institute, The Aerospace Corporation

12:00pm – BUFFET LUNCH

THIRD SESSION

1:30pm - 1) System Resilience: Capabilities, Culture and Infrastructure; Mr. Scott Jackson, University of Southern California

2:00pm - 2) The Systems Engineering Role in the Program Execution Machine, Dr. Rob Wright, Director, Systems Verification Center, Space and Airborne Systems, Raytheon Corporation

2:30pm - Break

PANEL DISCUSSION

2:45pm - Program Executability: What governs how decisions are made
Moderator: Ms. Roz Lewis, Director, Cost and Requirements Department, Aerospace Corporation

Panel Members:

-Col. Pelc, Program Director, Missile Defense Space Systems

-Mr. Steve Lunny, Director, NGST Systems Engineering

-Ms. Beth King, VP, Business Development and Strategic Integration, Lockheed Martin

-Dr. Rob Wright, Director, Systems Verification Center, Space and Airborne Systems, Raytheon Corporation

-Mr. Charles Touns, VP, Navigation and Comm Systems, Boeing

-Dr. David Gorney, VP, Space Programs Operations, Aerospace Corporation

CLOSING AND PRESENTATIONS

4:30pm Dr. Jack Elson, Presentation to Panel Members and Keynote Speaker

Abstracts

Jorg Largent, Northrop Grumman Corporation

The Institutionalization of Experienced-Based Process Improvements: Lessons Learned

“Lesson learned” is a popular term, but the term is often misunderstood. A lesson learned is a process improvement that is based on experience, either good or bad, that has been institutionalized. Institutionalization is important: a lesson learned is not a “lesson learned” until the lesson is “learned.”

The substance of this presentation is a methodology to accomplish “knowledge reuse,” to use terminology from the INCOSE handbook. With “institutionalization” or “knowledge reuse” as the intended product, this paper defines lessons learned from the perspective of that product and proffers some thoughts on common misunderstandings. We then discuss how to capture data on lessons learned, control and analyze the data, and how to provide feedback. The intent of this process is to provide a deliberate closed loop to benefit the near-term and long-term enterprise endeavors.

Jean Gebman, RAND

Strengthening the Bond between Systems Engineering and Systems Management

This presentation describes a candidate framework for strengthening the capacity of systems engineers to add important value to systems that may be directed by managers unfamiliar with the full range of contributions that systems engineering can make to assuring favorable outcomes for even the most challenging systems. The framework reflects lessons drawn from several decades of research, including acquisition and sustainment of aircraft weapon systems, and modern business practices. Adoption of such a framework may provide system managers, systems engineers, and functional engineers a common frame of reference that (1) helps clarify thinking about customer interests and (2) uses such interests to drive business practices in ways that best manage technical resources and best guide technical work throughout a system’s life cycle.