



NEWSLETTER

Vol. 5: Issue No. 5

October 2007



RECENT EVENT

Tuesday, October 9 Speaker Meeting

“Systems Engineering Approach and Application at Southern California Edison ”

J. Gregory Goldasich & Jeff Gooding
Southern California Edison

UPCOMING EVENTS

Tuesday, November 13 Speaker Meeting

“Systems Engineering for the Complex, Boundary Spanning Network Centric System of Systems Programs ”

Anna Warner
The Boeing Company

Location

National University
El Segundo, CA 90045-6905

Networking 5:30 pm
Presentation 6:30 pm

Saturday, November 17 Tutorial

“Systems Engineering for the Complex, Boundary Spanning Network Centric System of Systems Programs ”

Anna Warner
The Boeing Company

Location

Loyola Marymount University (LMU)
1 LMU Dr.
Westchester (Los Angeles), CA 90045-2659

7:30 am – Registration and continental breakfast
8:30a.m. – 4:30 – Presentation

December Tutorial

Tentatively set for first or second week of the month, topics, speakers and locations to be announced

INCOSE-LA Holiday Party

December 2007, date and location to be announced

Benefits of Being a Certified Systems Engineering Professional (CSEP)

*Michael Krueger CSEP
ASE Consulting LLC*

In a recent email from Joe Wong of Northrop Grumman Defense Mission Systems, he asked Jim Manson, INCOSE-LA President, about the benefits of being a Certified Systems Engineering Professional (CSEP). Michael Krueger of ASE Consulting, himself a CSEP, was kind enough to answer this question which we are reprinting for the benefit of our members.

Joe asked:

“What are the benefits of being a CSEP?”

A) Is there an established preference for U.S. companies to recruit a CSEP more so than a non-CSEP (who also has a credible number of years experience)?

B) Are they paid more?

C) Are they more likely to be hired as consultants and/or specialty teachers?

D) Any statistics that support the above questions/facts? “

First – As you may or may not know, the INCOSE CSEP program is in its 4th year. And if we look at other professional certification programs e.g. PMI (16 plus years) it took them approx 7 years before the PMP program started to ramp up and it needed a major company to start requiring its' Project Managers to become PMPs to make that certification program a success. Also the IEEE Software certification is in its' 7th year and is taking a similar path as INCOSE with similar numbers of engineers being certified software engineers. This is a brief comparison, now here is my attempt at the questions.

A) Is there an established preference for U.S. companies to recruit a CSEP more so than a non-CSEP (who also has a credible number of years experience)?

I wish I could say that companies prefer CSEPs over non-CSEPs but we have no data to support this claim. What I do know now through our marketing efforts, major DoD companies such as Lockheed Martin, L-3, NG, GD, SAIC and others have expressed a desire to certify groups of engineers as CSEPs. We are also working with the Defense Acquisition University (DAU) to develop an version of the CSEP exam for them. Similar interest

October 9 Speaker Meeting Report

“Systems Engineering Approach and Application at Southern California Edison ”

J. Gregory Goldasich

General Manager, IT-Technology and Risk Management

&

Jeff Gooding

Project Engineer, Information Technology

Southern California Edison

The Aerospace Corporation

El Segundo, CA 90245

ABSTRACT: In 1998, Southern California Edison (SCE) created a Systems Engineering organization in order to introduce and implement the practice of systems engineering on IT programs with the express goal of ensuring the integration and successful realization of IT systems. The initial focus of this organization was to:

1. identify, define, market, and institutionalize basic systems engineering practices and
2. define and implement a systems engineering skills development program.

Mr. Greg Goldasich discussed the evolution and expansion of this organization, major considerations in the application of the systems engineering discipline at SCE/IT and in the product development arena, and the value added by taking a systems engineering approach.

Mr. Jeff Gooding focused on the application of systems engineering to the Edison SmartConnect™ program. Edison SmartConnect will allow SCE to manage load more efficiently and optimize energy resources. In addition, this technology is expected to reduce peak demand through consumer incentives – which in turn decreases the need to build new generation facilities. Once the program is fully implemented, Edison SmartConnect will give customers real-time energy consumption information so they can manage their own energy use and costs. The use of systems engineering contributed to the wide recognition Edison SmartConnect has as the leading industry standard in advanced metering.

BIOGRAPHIES:



J. Gregory Goldasich, General Manager, IT-Technology and Risk Management, *Southern California Edison*. Greg Goldasich joined SCE in 2003 after 30 years experience in IT as a manager, director and consultant. His business and functional experience spans a wide range of industries including Energy and Utilities, Media/Entertainment, Product Distribution, Health Care, Manufacturing and Commodity Trading. During

has come from the UK MOD, and the Swedish Defense Materiel Administration. These opportunities have occurred since IS07 in San Diego. We believe these are key milestones in the CSEP program since both companies and customers will create the pull needed to make the INCOSE CSEP program successful. You can read about this in detail in this month's INCOSE INSIGHT. You can also see the metrics we keep on the distribution of CSEPs across various companies (NG currently has the most CSEPs).

B) Are they paid more?

We do not have data on this yet. But we believe that companies will put a premium on CSEPs when RFP's start to require some % of CSEPs.

C) Are they more likely to be hired as consultants and/or specialty teachers?

Again we have no data on this. But it makes sense that consultants would become CSEPs to discriminate themselves from other consultants. I know that is the reason I got involved with the CSEP program.

D) Any statistics that support the above questions/facts?

On the INCOSE Certification web site, <http://www.incose.org/educationcareers/certification/index.aspx>, there is a presentation that contains some of these metrics, but it will be a bit old. Also, as mentioned earlier, the September issue of INCOSE INSIGHT has some internal metrics but not the ones you were requesting.

In summary, I believe we are at the point where the CSEP program is starting to grow and by next IS08 we will have expanded our program to include certifications for students and a Masters Certification level. We are working with ISO to have Version 3.1 of the handbook become an ISO Technical Report and then create an ISO SE Certification that will become an international reference for Systems Engineering Certification. Many opportunities are emerging for the certification program that I hope the INCOSE members can take part in.

Message from the Editor

In order to better serve our membership, INCOSE-LA has instituted a more timely method of announcing upcoming events. In addition to the Reflector notices that are sent out via email by Susan Ruth, we are now sending out postcards announcing upcoming events. This allows us to deliver timely information to our members well in advance of the RSVP date. These postcards are meant as a supplement, not a replacement to the newsletter, which has a lengthier process time and involves a great deal more time to produce.

We hope that you are pleased with this addition to the communications pipeline. We would like to remind all our members to please ensure that their contact information is up-to-date with the main INCOSE organization. Kudos to Lee-Ann Seeling, INCOSE-LA Secretary, for this idea!

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his service with SCE, he has launched and expanded IT's Systems Engineering organization; led the Center of Competency programs for Architects and Engineers in IT; introduced and championed the deployment of common services, shared tools and methodology for systems/services definition, design and development. Mr. Goldasich earned a Bachelor's Degree in Electrical and Computer Engineering and an MBA from University of Illinois at Urbana-Champaign.



Jeff Gooding, Project Engineer, Information Technology, *Southern California Edison*. Jeff Gooding is a Project Engineer in Southern California Edison's (SCE's) IT department. He is currently serving as the Sr. Project Engineer supporting the Edison SmartConnect project, SCE's Advanced Metering Infrastructure (AMI) Program. Prior to joining the Edison SmartConnect Program, Jeff supported SCE's develop-

ment of power procurement and nuclear software applications for the Energy Supply & Marketing (ES&M) department and San Onofre Nuclear Generating Station (SONGS).

Prior to joining SCE in 2003, Jeff was a Senior Manager at Cap Gemini Consulting where he served in the Advanced Development & Integration division of the Utilities practice. As such, he served as an architect and technologist on projects at the California ISO, Ontario IMO, Portland General Electric and PG&E. Earlier, Jeff was a Partner at Rapid Access Systems (RAS) where he served as lead designer for a number of decision support applications. Jeff holds M.B.A. and B.S. degrees from California State Polytechnic University, Pomona.

ABSTRACT: The presentation provides a high level overview of the framework for the deployment of systems engineering on complex, geographically and organizationally distributed programs. The three domains of systems engineering programs will be introduced - traditional, transitional and System of Systems. Each domain has different characteristics and calls for application of different styles of management, information support and communication styles. Within this context, distributed collaboration, net centric architectures, system scale, management and legacy frameworks, roles of network and software, interoperability and asset management will also be discussed. These topics will be presented in more detail in the tutorial session that follows on Saturday, Nov. 17.

BIOGRAPHY:



Anna Warner is working for The Boeing Company in its Huntington Beach Division and is currently responsible for system of systems engineering process integration and improvement, lean deployment and systems engineering and program management best practices assessments on the \$32 Billion Future Combat System Program. In a past she managed engineering programs in commercial aircraft Division of MDC and led GPS program to achieve CMMI level 5 certification. She also led Project Management category for the level 5 CMMI certification achieved on C-17 program. Before joining aerospace she worked as an information technology manager for the Apple Computer and Tandon Corporation and she has taught systems engineering, program management and MIS courses at the graduate level programs in engineering and technical management in Southern California colleges.

Ms. Warner is graduate of UCLA Anderson School of Business where she got an MBA and USC where she graduated with an MS in Systems Engineering and Architecting. That makes it hard for her to select her team loyalties. She originally came to California from Poland where she graduated from University of Warsaw. She currently is enrolled in the doctoral program at the USC School of Engineering, where she specializes in distributed collaboration on complex programs. She is a certified Program Management Professional by PMI.

RESERVATIONS: You MUST RSVP to attend, NO EXCEPTIONS. RSVP via website (at the bottom of the event web page) at (www.incose-la.org) or to Paul Su, registration@incose-la.org, 310-336-2602) by Friday, November 9.

DIRECTIONS TO NATIONAL UNIVERSITY

From the North: Take 405 South to exit 44. Turn right on La Cienega. Turn left on Pacific Concourse Drive. Go past the construction and the Court House. Turn right in to parking area. Enter through back entrance. Take elevators to third floor.

From the South: Take 405 North to exit 44. Turn left onto El Segundo Blvd. Turn right on La Cienega. Turn left on Pacific Concourse Drive. Go past the construction and the Court House. Turn right in to parking area. Enter through back entrance. Take elevators to third floor.

**Tuesday, November 13
Speaker Meeting**

“Systems Engineering for the Complex, Boundary Spanning Network Centric System of Systems Programs ”

*Anna Warner
The Boeing Company*

**National University
5245 Pacific Concourse Drive
El Segundo, CA 90045-6905**

**Networking 5:30 pm (with substantial snacks)
Announcements and Speaker Introduction 6:20 pm
Speaker 6:30 pm**

**Members Free
Guests – Free, \$10.00 donation suggested (for the snacks, chapter pays for members)**

From the East: Take 105 to exit 2A. Turn right onto Imperial Highway. Turn right onto La Cienega. Turn right onto Pacific Concourse Drive. Go past the construction and the Court House. Turn right in to parking area. Enter through back entrance. Take elevators to third floor.

Parking is free after 5pm. You may have to take a ticket if you come early, but you won't have to pay.

SPEAKER MEETING WEBCAST INFORMATION

Remote sites will be available for receiving the presentation via live webcasts. RSVP requested via the INCOSE-LA website (www.incose-la.org <<http://www.incose-la.org/>>) or to Paul Su (registration@incose-la.org, 310-336-3602). Typical remote locations have included one or more of the following sites (check website for current participating locations):

- Palmdale - Aero Institute - Open Site
- Palmdale - Lockheed and Northrop - Employees only
- Woodland Hills - Northrop Grumman - Employees only
- Irvine - UC Irvine - Open Site
- Sylmar - St. Jude Medical - Employees only
- Long Beach - Boeing - Employees only
- Huntington Beach - Boeing - Employees only
- Pasadena - JPL - Open Site

Saturday, November 17 Tutorial

“Systems Engineering for the Complex, Boundary Spanning Network Centric System of Systems Programs”

*Anna Warner
The Boeing Company*

**Loyola Marymount University (LMU)
1 LMU Dr.
Westchester (Los Angeles), CA 90045**

DATE/TIME

Saturday, November 17

- 7:30 am – Registration and continental breakfast
- 8:30a.m. – 4:30p.m. – Presentation
- 10:00a.m.—morning break with refreshments
- Noon – 1:00p.m. – Box lunch
(sandwich, chips, cookie, beverages)
- 2:30 p.m. – afternoon break with refreshments

COST

INCOSE members — \$50.00

Non-members — \$60.00

(includes all food and tutorial materials)

ABSTRACT: The tutorial, a more detailed version of the November 13 Speaker Meeting, provides an overview of the framework for the deployment of systems engineering on complex,

geographically and organizationally distributed programs. As complexity of the program increases, traditional systems engineering based on hierarchical decomposition has to be enhanced since practices that work well for the single thread systems, developed in collocated environment, under single source of authority may not work well in the environment of distributed, boundary spanning, multi-thread programs. Each program operates in four varied contexts: systems, stakeholders, strategic and implementation (tactical). Depending on the level of the complexity and stability of the system, program may belong to one of the three domains – traditional, transitional or System of Systems. Each domain has different characteristics and calls for application of different styles of management, information support and communication styles. Other characteristics that have to be taken into consideration are impact of the scale of the system, its ownership and management framework, legacy framework for the operations and role of network and software.

Critical success factors for collaboration distributed across the boundaries are presented and net centric architectures are recommended for the management of the System of Systems to achieve acceptable levels of governance, interoperability and asset management.

BIOGRAPHY: See write up on November 13 Speaker Meeting.

RESERVATIONS: Please register to attend via the INCOSE-LA website (at the bottom of the event web page) at (www.incose-la.org) or to Paul Su (registration@incose-la.org, 310-336-2602) by Tuesday, November 13.

DIRECTIONS TO Loyola Marymount University (LMU)

From the North: Travel on 405 South, exit on Jefferson Blvd., and turn right. Head west and make a left onto Lincoln Blvd. Head south and turn left into the campus on LMU Drive. You can get a parking pass from the guard at the front gate.

From the South: Travel on 405 North, exit on La Tijera, make a left onto La Tijera. Take La Tijera until Manchester Boulevard and make a right (traveling west). Stay on Manchester until you reach Lincoln Boulevard and make a right. On Lincoln Boulevard, proceed for approximately 3/4 of a mile until you arrive at our main entrance on the corner of Lincoln and LMU Drive. You can get a parking pass from the guard at the front gate.

From the East (using the 105 Freeway): Travel on 105 West, exit on Sepulveda Blvd., and go north. Remain in either of the left two lanes and merge onto Lincoln Blvd. Follow Lincoln Blvd north past Manchester Blvd. Turn right onto LMU Drive. You can get a parking pass from the guard at the front gate.

From the East (using the 10 Freeway): Travel on 10 West to 405 South, exit on Jefferson Blvd., and turn right. Head west and make a left onto Lincoln Blvd. Head south and turn left into the campus on LMU Drive. You can get a parking pass from the guard at the front gate.

<http://www.lmu.edu/Page25525.aspx>

***New Member List deferred to the
November Edition***

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CSEA
**CONFERENCE ON SYSTEMS
 ENGINEERING RESEARCH**
An International Conference

Call for Papers

Sixth Annual Conference on Systems Engineering Research

April 4-5, 2008 Los Angeles, California
 Crowne Plaza Hotel, Redondo Beach
<http://www.incose-la.org/cser2008/>

Topics

We invite original research papers addressing the conception, design and architecting, development, modeling and simulating, production, operation and support of these systems; definition of metrics of performance, and improvement methods; assessment and mitigation of risks; definition of critical success factors, and best practices. The refereed research papers at the conference will be complemented with invited talks. Abstracts are invited in the following broad areas:

- Ultra large-scale Systems Engineering
- Agile Systems Engineering, Development, Integration and Deployment
- Context-aware, Secure Net centric Systems
- Robust and Sustainable System Designs and Architectures
- Integrated Systems and Software Engineering and Development
- Application of Systems Engineering to the Extended Enterprise
- Virtual Collaborative Engineering Environments and Organizations
- Systems Architecting and Architecture Tradeoff Analysis
- Cognitive Engineering and Human-Systems Integration

Abstracts

Abstracts must include:

1. A Title
2. Full Author Name and Affiliations
3. Complete Address for the Corresponding Author

Doctoral candidates pursuing systems engineering related research are specially encouraged to submit abstracts. One technical track at the CSER'08 will be devoted to papers by doctoral candidates.

Please submit your abstract electronically in Microsoft Word (not to exceed 600 words) to:

Dr. Azad Madni, Chair, Conference Technical Program
 Chief Executive Officer
 Intelligent Systems Technology, Inc.
 Santa Monica, California 90405
 Tel: 310-581-5440 x144; cser08@IntelSysTech.com



The University of Southern California in collaboration with Stevens Institute of Technology presents the 6th annual Conference on Systems Engineering Research.

The primary conference objective is to provide practitioners and researchers in academia, industry, and government a common platform to present, discuss and influence Systems Engineering research with the intent to enhance Systems Engineering practice and education. Papers are solicited pertaining to research in all these areas.

Organized by the University of Southern California (USC) in collaboration with Stevens Institute of Technology, managed by the Los Angeles Chapter of the International Council on Systems Engineering (INCOSE). Additionally, CSER 2008 is technically co-sponsored by the IEEE Systems Council, INCOSE's SEANET, MIT's "Systems Engineering Advancement Research Initiative," Institute of Industrial Engineers, and Intelligent Systems Technology, Inc.

Milestones

Abstract submission: Nov. 16, 2007
 Acceptance notification: Jan. 3, 2008
 Camera ready copy due: Feb. 1, 2008



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Return Address:

**PO Box 490341
Los Angeles, CA 90049**

Forwarding Address Requested

The International Council on Systems Engineering (INCOSE) is an organization formed for the purpose of advancing the art and science of systems engineering in various areas of the public and private sectors. The Los Angeles Chapter meets several times per year for dinner meetings, and additionally sponsors tutorials and other activities of interest to those in the systems engineering field or related fields. L. A. Chapter Officers are as follows:

2007 Officers and Board

President:	James Manson III	james.a.manson-iii@boeing.com or	president@incose-la.org
Vice-President:	John "David" Boyd	john.boyd@incose.org or	vicepresident@incose-la.org
Past President:	Gina Kostelecky-Shankle	Gina.Kostelecky-Shankle@ngc.com or	pastpresident@incose-la.org
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Those interested in INCOSE membership please contact Paul Cudney - paul.cudney@incose.org. If you wish to be placed on our E-mail distribution, please contact Susan Ruth - susan.c.ruth@aero.org.