



NEWSLETTER



2002, 2004-12



2003



2008, 2012
President's Award
for Most
Outstanding Chapter



A One-two Punch: Election of Chapter Officers (You Decide) Town Hall Meeting (You Let Us Know)

First: You Decide

The success of the Los Angeles Chapter is driven by two things: our officers and our members. INCOSE has acknowledged the Chapter with the Gold Circle Award every year since 2003 and with the President's Award for Most Outstanding Chapter in 2008 and 2012 (chapters are not considered for repetition more frequently). However, more important than awards are the services and value provided to and available to the Chapter members.

The Board of Directors of the Los Angeles Chapter consists of ten elected officers: President, Vice President, Immediate Past President, Secretary, Treasurer, and five At-large Directors who are the chairmen of the five standing committees. The President, Vice President, Immediate Past President, Secretary and Treasurer serve one year terms, and the five At-large Directors serve staggered two-years terms.

The Board of Directors has a long history of service, hard work, dedication, and leadership. Each of the candidates up for election has the industry, dedication, and vision to continue this heritage, but first, you, the membership of the Los Angeles Chapter, get to decide. Please review the candidates biographies in this edition of the Newsletter and then go on line to cast your vote.

(See One-Two Punch continued on page 3)

Meet Our Candidates for Leadership: President, Vice President, Secretary, Treasurer, Director of Ways and Means, and Director of Systems Engineering Education

Candidate for President:



Mike Wallace is a Systems Engineering Manager with over 27 years experience in the aerospace industry in various technical positions from project engineering, to project management and systems engineering. Mike works for the Northrop Grumman Corporation in Palmdale, California, and has been with the company for nine years. Mike currently serves as a Deputy Systems

Engineering Integration Team Integrated Product Team Manager. Mike was the B-2 Technical Integration IPT (IPT) manager where he supported the B-2 Enterprise in various systems engineering capacities, such as the B-2 Weapons System Resources Manager, leading various programs through systems engineering milestone reviews and providing systems engineering support across various programs.

Prior to Northrop Grumman, Mike worked for Teledyne Electronics Safety Products as a project manager where he led a team of engineers from various engineering disciplines in successfully developing sequencing products for the United States Navy and Air Force.

(See Candidates, continued on page 2)

Inside This Edition

Features

A One-two Punch	1
Candidates for Leadership	1
How to Vote	2
Chapter Awards	4
Mission Statements	8
CSER Sampler	10

Membership

New Members	11
-------------	----

Education/Conferences

Holiday Party	6
PPI Human Systems Integration	4
The 2014 International Workshop	5
PPI Project Improvements	5
CSER	6, 7
CTI CSEP Training	9

Whom to Contact

INCOSE-LA Board Members	11
-------------------------	----

Upcoming Events

Back page	
-----------	--

HOW TO VOTE:

Go online at www.incose-la.org.

Voting starts November 26 and ends December 26.

(Candidates, continued from page 1)

Mike also served four years in the United States Air Force on active duty, plus eleven years with the United States Civil Service at Edwards Air Force Base, California.

Mike is an adjunct systems engineering instructor at California State University, Long Beach, the Antelope Valley extension program. He also is an adjunct mathematics instructor at the Antelope Valley College in Lancaster, California. He teaches algebra and statistics and has done so for the past nine years. Mike has also been a mentor for the Systems Engineer Associate program, established by Northrop Grumman Aerospace Sector, and has mentored five junior engineers in their transition in becoming systems engineers.

Mike joined INCOSE-LA in 2005 and has supported the Chapter on several occasions. He was the registration chairman for the INCOSE-LA 2007 mini-conference. He hosts the Antelope Valley remote site location for the INCOSE-LA lecture series, served as the 2012 INCOSE Mini-conference Conference Manager and currently serves as the Vice President of the INCOSE-LA Chapter.

Mike has a Bachelor of Science in Electrical Engineering, an M.S. in Engineering Management from California State University, Northridge and an Engineer's Degree in Industrial and Systems Engineering from the University of Southern California (USC). Mike has also completed a Graduate Certificate in System Architecture and Engineering from USC, a Certificate in Systems Engineering from California Institute of Technology (Caltech) and a Certificate in Lean Six-Sigma Black Belt from the University of Villanova.

Candidate for Vice President:



Stephen Guine is a systems engineering manager for Northrop Grumman Aerospace in Palmdale, California. He has over seventeen years of experience implementing and managing systems engineering activities on multiple Northrop Grumman programs and projects as well as for other organizations including Kaiser Permanente, PacificCare, Los Angeles County Department of Public Health, and the Metropolitan Water District of

Southern California.

Stephen is also the founder of The Strategy Department — a strategy and systems engineering consulting firm focused on bringing strategic systems thinking and project execution to community-based nonprofit organizations and small businesses. In this capacity, Stephen has over twenty years of experience in business process and technology consulting, information architecture development, strategic planning, and end-user education and training.

Stephen holds a Bachelor of Arts in Political Science from the University of California Santa Barbara, a Master of Public Policy from USC, and an M.B.A. from the Drucker School of Management. In addition, Stephen has earned certificates in systems engineering and in Aerospace Project Management from Caltech, and a certificate in Digital Avionics from the University of California, Los Angeles. Stephen is a proud veteran of the United States Marine Corps.

Candidate for Secretary:



Scott Birtalan has volunteered for the Los Angeles Chapter since he joined INCOSE in 2010. He began as a member of the Networking Committee helping to organize fun and casual events for the local systems engineering community. Since then Scott has taken the lead on networking and the lead of the newly formed Student Divisions. After a successful start to the USC Division Scott coordinated the startup of the Loyola Marymount University Student Division.

With two years of continuous student leadership at the two schools, the Chapter will soon be expanding the student outreach program with more Student Divisions, increasing the engagement opportunities for newer engineers within the Student Divisions, the Chapter, and the whole INCOSE organization.

Scott has been employed by Northrop Grumman in the Los Angeles area since 2002. Working in the area of Operations Analysis initially, he has rotated through both leadership positions and varying technical positions, working to broaden his knowledge of the systems engineering practice, project management, and, particularly, aircraft systems applications. Scott is currently located at Northrop Grumman's Antelope Valley facility working as a systems engineer developing technologies for advanced systems.

Scott's educational background is in Aerospace Engineering with a bachelor's of science from Cal Poly San Luis Obispo. His systems engineering education is from USC with a master's of science in Operations Research. He also has attended the Caltech Project Management Certification Course and has been an INCOSE Certified Systems Engineering Professional since 2008.

When Scott isn't working he spends his free time hiking and backpacking in the local mountains, participating in plenty of fitness activities, and roving the streets of Los Angeles for fantastic food.

(See Candidates, continued on page 3)

Today I am reminded of Downs's Law of Control Duplication: Any attempt to monitor a large organization tends to generate another.

Dr. K. W. Smith fb

(Candidates, continued from page 2)

Candidate for Treasurer:



Harvey Soldan is a systems engineer at the Jet Propulsion Laboratory (JPL) and has over 30 years experience in NASA, military, and commercial systems. He joined JPL as a contractor in 1987 and is currently the Deep Space Network Systems Engineer for the DSN Aperture Enhancement Project,

adding new 34m aperture antennas to the existing DSN at all three complexes around the world. Previously, he was the Deep Space Network Tracking, Telemetry, and Command Systems Engineer.

Harvey has worked on many military and commercial programs specializing in technical publications, testing, communications, and systems engineering for hardware and software intensive systems. In addition, he has worked on projects at TELOS, Raytheon, Walt Disney, Avicom and Gould NAVCOM.

Harvey is completing his second term as INCOSE-LA treasurer and is the 2013 Mini-Conference Chair.

Harvey received his B.A. from The John Hopkins University in Biology with a minor in Chemistry.

Candidate for Director of the Ways and Means Committee:



Paul Cudney has volunteered for the INCOSE Los Angeles Chapter since he joined INCOSE in May 2000. He was registrar for CSER-2011, twice Track Chairman at INCOSE-LA Mini-Conferences, twice Secretary, and served as Membership Director from 2004 through 2012. Paul supports activities to increase the knowledge and stature of our members, and seeks to increase volunteer participation as a low-risk opportunity for

direct job-related experience.

Paul retired in 2009 from Lockheed Martin as a Senior Systems Engineer. He has nearly 45 years experience in systems integration, software maintenance, test, and verification for real-time control systems involving aircraft, missiles and satellite ground systems. Starting with System Development Corporation in 1964, Paul helped update the SAGE (Semi Automatic Ground Environment) system – the first networked air defense command and control system. Among other projects, he designed and implemented the multi-computer control program for the Air Combat Maneuvering Range (you saw ACMR displays in the movie Top Gun).

Paul has been active in other technical societies, serving as Chairman of the Los Angeles Chapter of the Association for Computing Machinery (ACM), and Chairman of the ACM Committee on Chapters. Paul also has volunteered on the Steering Committees for the Southern California and Los Angeles Software Process Improvement Network (SPIN).

Candidate for Director of Systems Engineering Education:



Yvette Rodriguez is a PhD Candidate at the University of Southern California Daniel J. Epstein Industrial and Systems Engineering Department and teaches systems engineering at Defense Acquisition University (DAU) with 18 years of Department of Defense Acquisition experience. Ms. Rodriguez’s research interests span the engineering of resilient

systems with an emphasis in Model Based Systems Engineering, system resilience, and Cubesat system resilience. She is a founding member of the INCOSE@USC Student Division and the 2012-2013 Vice-President. Prior to teaching at DAU, she was a key player in numerous successful ship defense system installations with the Department of the Navy. She was responsible for providing Quick Reaction Combat Capability as the Lead Combat Systems Engineer for the installation of Ship Self Defense System (SSDS) MK1 aboard 13 amphibious and 4 carrier class ships. She was the recipient of the 1999 Program Executive Office Theater Surface Combatants (PEO TSC) Team Award for Excellence, the 1998 Golden Hammer Award, and the 1996 NSWC PHD SSDS Special Achievement Award. She was also recognized by NAVSEA for her outstanding contributions to the Navy Anti-Ship Missile Defense (ASMD) Radar Program. She has extensive experience in the management, deployment and support of U.S. Naval ship defense systems, with an emphasis in lean transformation. She received her M.S. in Systems Engineering from the Naval Postgraduate School and her B.S. in Electrical Engineering from USC.



January 14, 2014
Town Hall Meeting
 Check your email for a Reflector Notice
 or go to the INCOSE-LA website for details

(One-Two Punch, continued from page 1)

Second: You Let Us Know

The first meeting of the year (January 14, 2014) is the meeting at which Chapter conducts a “town hall” meeting. The purpose of this meeting is for the Board of Directors to listen to the members; this is the members’ opportunity to meet the new Board of Directors and to let them know what you think, what you like, what you don’t like, and what improvements you would like to see – how the Chapter can better serve you. Save the date: January 14, 2014. If you have a topic or speaker that you would like to learn more about in 2014, please bring your suggestion to the meeting or send it to shirleytseng@earthlink.net. Details in work; reflector notices will be sent out and the Chapter website (<http://www.incose-la.org/>) will be updated with the latest information.

Human Systems Integration

5 - Day Course

This world-leading course focuses on cognitive issues, which are particularly challenging for Human Systems Integration because standard engineering methods do not capture the essential complexities of cognition. This course introduces delegates to specialized methods of human systems analysis and design, and illustrates how those methods can be used to enhance performance and safety within large-scale socio-technical systems.

PLACES STILL AVAILABLE!

Los Angeles, CA 3 March - 7 March 2014

Register 3 or more delegates to the same course to receive a 10% discount off your registration

Find out more: www.ppi-int.com

Awards, and How You Can Help

By Mike Wallace, Vice President, INCOSE-LA Chapter

Your chapter needs to know about your 2013 contributions to the field of systems engineering!

As we approach the end of another exciting and fun filled year as members of INCOSE-LA chapter, it is imperative that we reflect on our professional accomplishments and the contributions made through our involvement in the INCOSE organization. Through the annual chapter awards program, INCOSE recognizes the chapters' valuable contributions and accomplishments in the systems engineering profession. The chapter awards consist of The Gold Circle Award, the Silver Circle Award and the Bronze Circle Award. These awards recognize INCOSE chapters for their involvement in local services that meet and or exceed the organization's standard criteria. The awards are presented annually at the INCOSE International Symposium. In addition to awards previously mentioned, the Director's Award for the most improved chapter and The President's Award for Outstanding Chapter are also awarded to acknowledge the special effort required to significantly improve an INCOSE Chapter.

As a proud member of the INCOSE-LA chapter, I am elated that we have received the Gold Circle Award for the past 12 years and also received the President's Award in for 2008 and 2012. To continue on this path of professional excellence, it

requires that our INCOSE-LA members are active within their professional systems engineering lives as INCOSE representatives. Chapter awards submittals focus on the areas of training/planning, activities, communications, membership, technical, outreach, INCOSE support, and operations.

We want to know about your systems engineering activities or accomplishments in 2013. Members are encouraged to provide the LA Chapter Awards Committee, on a regular basis, with evidence of their involvement or the SE goods and services they accomplish. To support the 2013 award submittal package for our chapter, we ask you to provide us with documentation related to your INCOSE or SE activities – such as copies of flyers, meeting minutes, correspondence, publications, citations, presentations and certifications achieved - and submit them to my attention, so that we can recognize your efforts and include this evidence. We need to know about your activities and contributions by 12/15/2013 so that this information may be compiled and included with the Los Angeles Chapter 2013 award submittal. (All evidence for 2013 award submittal must be completed by the chapters by January 5, 2014.) Submit your evidence to awards@incose-la.org. Thank you in advance for your commitment to excellence, continued support, and service to the INCOSE-LA chapter and the organization at large.

Coming in January: the 2014 International Workshop

INCOSE's International Workshop is the event of the year for systems engineers to contribute to the state of the art. Unlike INCOSE's annual International Symposium and other conferences, there are no paper, panel or tutorial presentations. Instead, attendees spend four days working alongside fellow systems engineers who are there to make a difference. Systems engineers at all levels and from all backgrounds are encouraged to engage in working sessions, and contribute their knowledge and experience to take the discipline forward.

Note: one and two day registrations are available for those who do not wish to attend the full work shop [Ed.].

IW2014 facilitates working meetings for groups engaged in INCOSE's major projects and in international Standards development, workshops to explore the Systems Engineering challenges in new sectors, opportunities for Chapter leaders to meet and share best practice, support sessions to help you get the most out of INCOSE's shared working environment and a broad range of other technical meetings. Planned sessions and points of contact will be published on the website as these become available, and attendees are encouraged to contact the relevant session leaders before the event for further information.

*Saturday, January 25, 2014 - Tuesday, January 28, 2014
In near-by Torrance at the Marriott South Bay, 3635 Fashion Way
Registration is now open at
<http://www.incose.org/newsevents/workshop/index.aspx>*

The 2014 International Workshop is being held in Torrance, a convenient location for Los Angeles area members who have been unable to attend past workshops because of the logistics of traveling long distances.

Echoing the advantages cited above, any members have expressed a preference for the IW's because of the opportunities to network with other systems engineers at more of a hands-on level. While in attendance, members can discover new tools, perhaps learn about job opportunities, or find a potential team member. You can learn what people from other parts of the country and around the world look like — put a face with the names of the luminaries. The IW is an opportunity for systems engineers to meet with other systems engineers and interface in areas of their particular interest.

In addition, one attraction at the IW that has become an annual is the soiree for members from the Los Angeles Chapter hosted by the Los Angeles Chapter. Find out who some of the talking heads are in the Chapter. Inane babblings of like-minded systems engineers, a chance to get out of the house.

A favorite activity — an advantage — of the International Workshop is Working Group Meetings. Working Groups were the subject of the INCOSE-LA Chapter Speaker Meeting. Dr. Padman Nagenthiram, a member of the INCOSE Board of Directors a member of the Chapter, discussed the focus and value of Working Groups. Specific Working Groups were then discussed:

(See IW14 continued on page 10)

Use PPI services to improve your projects

5 - DAY COURSE INFORMATION



Project Performance International (PPI) provides project-related public training courses, on-site training and consulting services on six continents. Our focus is on assisting your organization to reduce costs, meet schedules, and exceed stakeholder expectations. PPI has a worldwide reputation for providing high quality training, in major disciplines necessary to achieve project excellence.

UPCOMING 2014 DELIVERIES

Requirements Analysis and Specification Writing

January 27 - January 31	Las Vegas, NV
April 7 - April 11	Las Vegas, NV
August 25 - August 29	Las Vegas, NV
October 20 - October 24	Boston, MA

Systems Engineering

February 10 - February 14	Las Vegas, NV
June 2 - June 6	Las Vegas, NV
September 15 - September 19	Las Vegas, NV
December 1 - December 5	Las Vegas, NV

Systems Engineering Management

March 3 - March 7	Las Vegas, NV
April 28 - May 2	Austin, TX
August 11 - August 15	Washington, DC
December 1 - December 5	Las Vegas, NV

Software Engineering

September 29 - October 3	Washington, DC
--------------------------	----------------



Register 3 or more delegates to receive a 10% discount.

Contact PPI today to find out how to improve your project outcomes

www.ppi-int.com

*You are invited to the
**INCOSE-LA Chapter
 Holiday Party**
 Friday, December 6, 2013
 5:30 p.m. to 9:00 p.m.
 Del Rey Yacht Club
 13900 Palawan Way,
 Marina Del Rey, 90292*

COST: Dinner and Dessert: Members Free, Non-members and Guests \$20; Cash bar
 Parking is free but gated: Just buzz in, say you are attending the INCOSE Holiday Party.

EVENT CONTACT: Scott Birtalan, 424-217-0743,
scottbirtalan@gmail.com



R.S.V.P.: FIRM deadline is:
Tuesday, November 26th, 2013.

You must register to attend this event. Attendance is limited. We request that all reservations be made and paid online.

**Great people * Fine food * Lots of Fun
 White Elephant Gift Exchange**

An INCOSE-LA Tradition!



*If the problem with the television show is bad writing,
 change the actors.
 Rumored Hollywood strategy*

Politics, not technology, sets the limits of what technology is allowed to do.

Fact of Life #1, "The Art of Systems Architecting," Maier and Rechten

**Conference on
 Systems Engineering Research
 Coming to Los Angeles, March 2014**

The CSER leadership team is working on the preparations for the conference, laying the foundation for a successful event. The team is working in several areas to pull them all together for another first-class gathering of systems engineering thinking and advances.

Speakers: the team is working to engage several of the leading voices in systems engineering to speak to the conference. Dr. Wanda Austin, President and CEO of the Aerospace Corporation is planned to be the featured keynote speaker. In addition, Dr. George Friedman is the Honorary Chair of the Conference, with Dr. Azad Madni and Dr. Barry Boehm as Conference Co-Chairs.

Venue: the team is working closely with the Crowne Plaza Hotel. Located in Redondo Beach, the Crowne Plaza Redondo Beach is an excellent facility, with the added attractions of overlooking the Pacific Ocean and King Harbor Marina. This convenient beach hotel is just 7 miles from Los Angeles Airport (LAX) and is close to many favorite Southern California attractions. The leadership team has been meeting with the hotel staff to ensure that the accommodations, meeting rooms and meals will meet the needs of the conference and be in keeping with the tradition of excellence associated with INCOSE-LA, USC, and the name Crowne Plaza.

Papers: Well over 150 papers have been proposed and are in the process of being finalized. A team of veteran systems engineering professionals is being assembled to review the papers. The papers reflect the theme of the conference – Engineered Resilient Systems: Challenges and Opportunities in the 21st Century – and cover a spectrum of topics of value to practicing systems engineers on the forefront of the discipline. Some of the topics have a local touch as the “wrote the book” experts are our own Scott Jackson (Autonomous Resiliency Research and Applications) and “Bo” Oppenheim (Value-based, Lean, Agile Systems Engineering).

Sampler: The quality of the papers can be found in the “sampler” on page 10.

Opportunities: there are many opportunities to contribute to the success of the conference, particularly during the conference, and if you would like to be a part of this team, please contact Terry Rector at rector@irvine-sensors.com.

Stay Connected

Get the latest on INCOSE-LA happenings in the Reflector e-mails

If you wish to be placed on our e-mail distribution, contact Susan Ruth at susan.c.ruth@aero.org

Engineered Resilient Systems: Challenges and Opportunities in the 21st Century

March 21–22, 2014, Redondo Beach, CA

www.incose-la.org/cser2014

FEATURED KEYNOTE SPEAKER

Dr. Wanda Austin
President and CEO
The Aerospace Corporation

TOPICS

- Autonomous Resiliency Research and Applications
- Model Based Systems Engineering
- Value-based, Lean, Agile Systems Engineering
- Cybersecurity and System Security Engineering
- Social Networks and Graph Theory
- Early Stage Design Concepts and Economic Value of “ilities”
- Uncertainty and Complexity Management in Complex Systems
- Systems Architecting and Tradespace Analysis
- Cognitive Engineering and Human-Systems Integration
- Big Data and Analytics
- Cyber-Physical-Social Systems
- Systems/Critical Thinking

REGISTRATION DATES

Early Registration	Sep. 20, 2013 - Jan. 10, 2014
Normal Registration	Jan. 11, 2014 - Mar. 9, 2014
Late Registration	Mar. 10, 2014 - Mar. 21, 2014

The University of Southern California in collaboration with the Stevens Institute of Technology presents the 12th 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 topic areas.

Conference Honorary Chair

George Friedman (USC)

Conference General Co-Chairs:

Azad M. Madni (USC)

Barry Boehm (USC)

Technical Program Co-Chairs:

Marilee Wheaton (The Aerospace Corporation)

Michael Sievers (JPL)

Conference Management Co-Chairs:

Terry Rector (Irvine Sensors Corporation)

Rosalind Lewis (The Aerospace Corporation)

MILESTONES

Final Notification to Authors	Dec. 13, 2013
Submission of Final Paper	Jan. 10, 2014

GENERAL INFORMATION

 For information about registration, hotel, location, financial support and other subjects, see the CSER 2014 website at www.incose-la.org/cser2014





It's that time of year: write the AOP for next year!

Ah, November. Elections. Geese flying south. Thanksgiving. The second round of Christmas decorations at the mall. Surfing the internet to find the ideal toy. Surfing the internet to find something for the children. Non-plastic leaves changing colors. The end of the baseball season. College football rivalries. "Year-end holiday" (nee Christmas) parties.

Meanwhile, back at work, the dreaded year-end performance reviews are being prepared, and, in many a mahogany row, executives are standing up to the challenge of writing: the annual operating plan, a.k.a. the "AOP."

The AOP, that document that plans the year ahead to the satisfaction of higher management and communicates the vision to the workers, the document that catalogues a set of metrics that are satisfactorily tangible without being too specific, spread across a calendar of monthly, quarterly, and mid-year milestones leading to a year-end crescendo of praise and accomplishment come next December. And integral to this PowerPoint presentation, spreadsheet, and documentation is the ever essential mission statement.

The stronger your imagination the more variegated your universe.

Winston Churchill

A mission statement is a powerful tool, be it as a part of a project or an AOP. The cartoon above captures the truth behind many a mission statement. While a great deal of effort buttressed by sincere intentions, more often than not, goes into the creation of a mission statement, the results often prove to be those depicted above.

The Caltech curriculum on systems engineering, circa 1995, cited the opening of the television show "Star Trek" as an example of a good mission statement:

"These are the voyages of the Starship Enterprise. Her five-year mission: to explore strange new worlds, to seek out new life and new civilizations, to boldly go where no man has gone before."

(Continued on page 9)

(Continued from page 8)

This is a good example of a mission statement because it is short and succinct. It has a time limit: 5 years, but does not go into any more scheduling detail. This mission statement has three functions: “explore,” “seek,” and “go.” There are, of course, many more functions, such as life support and the functional decomposition of how does one “explore,” but that is not done as a part of the mission statement. A final touch of the right-brained aspect of this element of the process is the emotion appeal. The Enterprise did not just “go.” The mission statement is to **boldly** go....

A lot has changed since these words were written circa 1966. The mission statement for the show has morphed a bit and, so too the technical terminology of the systems engineering process.

Messrs. Mark Maier and Eberhardt Rechtin, in their text, “The Art of Systems Architecting,” describe a concept that is application to a mission statement:

“There is an interesting human test for a good heuristic. An experienced listener, on first hearing one, will know within seconds that it fits that individual’s model of the world.”

Be that as it may, please note that the title of Messrs. Maier’s and Rechtin’s tome includes the word “art.” Indeed there is an art form — it is the vision, the dream, that light bulb that starts the journey of a project, or of an organization for the next year.

Using these excerpts from Messrs. Maier’s and Rechtin’s text, one can derive two additional attributes of the Caltech curriculum on systems engineering, circa 1995, cited above;

1. A mission statement is a heuristic light bulb that illuminates the vision for the project or organization
2. A mission statement is tailored to the experiences of the listener (or reader).

So from the systems engineering discipline, some thoughts to consider.

Success is defined by the beholder, not by the architect.
 “The Art of Systems Architecting,” Maier and Rechtin

Decided only to be undecided, resolved to be irresolute, adamant for drift, solid for fluidity, all powerful to be impotent.
 Winston Churchill, on impotence

Take your Systems Engineering professional credentials to the next level.
 Learn more about the value of CSEP at
<http://www.incose.org/educationcareers/certification/index.aspx>

**Need a Volunteer?
 Tap into the INCOSE-LA Volunteer Databank!**



CSEP PREPARATION TRAINING

4-DAY COURSE

Learn valuable skills and improve your career prospects by becoming SEP Certified

SOME UPCOMING USA DELIVERIES	
January 13 - January 16 2014	Los Angeles, CA
February 10 - February 13 2014	San Diego, CA
February 24 - February 27 2014	Las Vegas, NV
May 12 - May 15 2014	Denver, CO
June 9 - June 12 2014	Minneapolis, MN

“Your instruction was fantastic. I learned a great deal. Without it, I doubt that I would have been able to pass the exam the first time around, nor would I have been motivated into creating this tool.”
 Delegate, Honeywell TSI, USA

“The instructor was very knowledgeable well-prepared, pleasant and accommodating. I would recommend this course to others.”
 Delegate, Booz Allen Hamilton, USA

INCOSE LA members receive \$200 discount
 visit our website to find out more

PLEASE REGISTER EARLY TO AVOID DISAPPOINTMENT
www.certificationtraining-int.com

(IW14, continued from page 5)

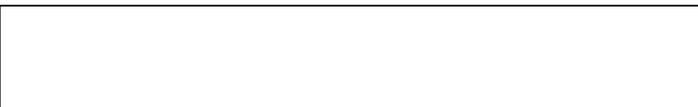
- Biomedical & Healthcare, by Steven Badelt
- Systems Science, by Dr. Len Troncale
- Model Based Systems Engineering, by Bjorn Cole
- Requirements, by Dr. Padman Nagenthiram
- Agile Systems and Systems Engineering, by Phyllis Marbach
- Resilient Systems, by Scott Jackson, and
- LEAN Systems Engineering, by Dr. “Bo” Oppenheim.

One insight into the broadening diversity and spectrum of interest of INCOSE can be found in an abstract from the Transportation Working Group, written by Jennifer Russell, EISE, the North American Outreach Coordinator of INCOSE’s Transportation Working Group:

As extroverted as systems engineers are, most look at others shoes rather than their own. Systems Engineers at the INCOSE IS13 surely observed that women in attendance overwhelmingly wore fashionable, unconventional nail polish colors in blues and greens. Blue and green nail polish was just budding in cultural popularity at the time of the conference. Are these systems engineering women particularly context sensitive? Is there something in their personality that leads them to notice and integrate subtle, detailed differences in the world around them? Can this lend insight about the characteristics of SEs and the types of people who may be best suited to the discipline? An analysis of personality characteristics using the Myers-Briggs Type Indicator provides a framework to consider those with innate potential to be systems engineers.

Interested? With the upcoming Thanksgiving and year-end holidays, the end of January will be here in no time. Learn all about the IW at:

<http://www.incose.org/newsevents/workshop/index.aspx>.



All the really important mistakes are made the first day.
“The Art of Systems Architecting,” Maier and Rechtin

The best engineering solutions are not necessarily the best political solutions.
Fact of Life #5, “The Art of Systems Architecting,” Maier and Rechtin

CSER Research Papers Abstract Sampler

Dr. Malcolm Currie has a paper abstract accepted for the 2014 CSER (Conference on Systems Engineering Research) to be held March 21-22 in Redondo Beach, California. CSER 2014 is an international event being jointly sponsored by the University of Southern California and the LA Chapter of INCOSE in collaboration with Stevens Institute of Technology to provide practitioners and researchers in academia, industry, and government a common platform to present, discuss, and influence systems engineering research and will provide access to forward-looking systems engineering research from invited speakers plus refereed papers, as well as perspectives from senior industry representatives.

The title of Dr Currie's paper is “Lessons Learned in System Modeling with Human Interaction Models” and addresses key SE (Systems Engineering) concepts that include:

Modeling of the real environment must be carefully thought out.

Modeling of human behavior with the system must especially be considered to avoid a subsequently discovered design flaw – not found until the SoS was in the field.

A summary of the changes needed to avoid such errors are described.

Project schedule and cost, especially for integration, can be greatly reduced with executable modeling of the system and its expected environment.

The focus is on a real SE project for a SoS (System of Systems) which was developed using modeling during requirements elicitation. The models included the humans which interacted with the component systems and the resulting SoS.

One of the primary lessons learned was that integration time and cost are greatly reduced when executable system models are utilized early in the project development. Another lesson was that engineers must be thorough in their understanding of the environment for a real time system to avoid the consequences of unanticipated flaws in the actual use of the deployed system. An SE modeling principle is introduced to aid in avoiding such flaws.

NOT A MEMBER? JOIN INCOSE!
Learn more about becoming a member by clicking on:
<http://www.incose.org/membership/valueofmembership.aspx>

The Board of Directors wishes to welcome the following new members to the Los Angeles Chapter of INCOSE.

Note: The information listed below is from the member directory and is based upon your initial membership application. If the information is not correct or complete, then please access the member directory (at www.incose.org) to update your information.

Name	Title	Company or Organization
Phil Vogel	Systems Engineer	ITT Exelis Inc.
John C. Olsen	Systems Engineer	DoD
Charles (Marc) Marquet		
Matthew O'Donnell		
Martin (Marty) Golub		
Graciano Patino	Principal Engineer /Project Manager	DIRECTV
Steve Rhee	Associate Systems Engineer	LinQuest Corporation
Charles (Chuck) E Judge	Senior Corporate Engineer	LinQuest Corporation

MEET THE LEADING SYSTEMS ENGINEERING RESEARCHERS!

SHOWCASE WHAT YOUR ORGANIZATION HAS TO OFFER!

**BE A SPONSOR OR AN EXHIBITOR AT
CSER 2014, MARCH 21 — 22**

**CONTACT TERRY RECTOR AT TERRY.RECTOR@INCOSE.ORG
FOR DETAILS.**



**CHECK OUT THE
WORKING GROUP OF
INTEREST TO YOU!
MEET COLLEAGUES WITH**

International Workshop 2014
January 25 to 28, 2014
To be held in the Los Angeles area
Details available from INCOSE in late October



2013 Board of Directors

Elected Officers			Elected At-large Directors		
President	Eric Belle	eric.belle@incose.org	Membership		
Vice-President	Michael Wallace	m.wallace@ngc.com	Programs	Shirley Tseng	shirleytseng@earthlink.net
Past President	John Silvas	silvas_john@bah.com	Systems Engineering Education		
Secretary	Paul Cudney	paul.cudney@incose.org	Ways and Means	Michael Maar	michael.maar@incose.org
Treasurer	Harvey Soldan	harvey.soldan@jpl.nasa.gov	Communications	DeAnna Regalbuto	deanna.regalbuto@verizon.net
Appointed Positions					
Newsletter Editor	Jorg Largent	jorg.largent@incose.org	Student Division Ambassador	Michael Kim	michael.kim@jhuapl.edu
Technical Society Liaison	Shirley Tseng	shirleytseng@earthlink.net	Reflector Manager	Susan Ruth	susan.c.ruth@aero.org
Chapter Recognition Manager	OPEN		Industrial Relations Manager	Jose Garcia Jr.	jose.s.garcia-jr@boeing.com
Professional Networking Chair	Scott Birtalan	scott.birtalan@ngc.com	Website Technical Manager	OPEN	
2013 Mini-Conference Chair	Harvey Soldan	harvey.soldan@jpl.nasa.gov	Lead Site Coordinator	OPEN	
2013 Mini-Conference Program Chair	Richard Emerson	remerson9@gmail.com	Representative to the SF Valley Engineer's Council	Stephen Guine	Stephen.Guine@ngc.com

INCOSE-LA Chapter NEWSLETTER

Vol. 11, Issue 6: December 2013 – January 2014

INCOSE-LA Chapter NEWSLETTER

Vol. 11, Issue 6: December, 2013 — January, 2014

Return Address:

**PO Box 10969
Westminster, CA 92685-0969**

Forwarding Service Requested

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization founded to develop and disseminate the interdisciplinary principles and practices that enable the realization of successful systems. INCOSE's mission is to share, promote, and advance the best of systems engineering from across the globe for the benefit of humanity and the planet. The Los Angeles Chapter meets several times per year for speaker meetings and, in addition, sponsors tutorials, mini-conferences and other activities of interest to those in systems engineering or related fields.

UPCOMING EVENTS

For more details on Chapter-sponsored events and registration, go to <http://www.incose-la.org>

INCOSE-LA Holiday Party

Date: Friday, December 6, 2013, 5:30 p.m. to 9:00 p.m.
Where: Del Rey Yacht Club
See page 6 for more details

Strategic Planning Meeting

Date: Saturday, January 18, 2014
Time: 9:00 a.m. – 3:00 p.m.
Details in work

January Town Hall Meeting and Officer Induction

“INCOSE Working Group Update”
Speakers: Representatives of various Working Groups
Date: Tuesday, January 14, 2014
Time: 5:30 p.m. – 7:45 p.m.
Where: details in work
Cost: Free for members; \$10.00 for non-members

International Workshop 2014

Date: Saturday through Tuesday, January 25 — 28, 2014
Where: Torrance Marriott South Bay
3635 Fashion Way, Torrance, California 90503
For details, go to:
<http://www.incose.org/newsevents/workshop/index.aspx>
See article on page 5

The 2014 Conference on Systems Engineering Research (CSER)

March 20 – 22, 2014

Crowne Plaza Hotel, Redondo Beach

See pages 6, 7, and 10

Election of Chapter officers during the month of December

Vote on-line at <http://www.incose-la.org>

See candidate biographies, starting on page 1