



NEWSLETTER

Vol. 5: Issue No. 3

July 2007



Please renew your 2007 INCOSE membership, this may be your last issue.



PAST EVENTS

Tuesday, June 12 Speaker Meeting

“Advancing the Practice of Systems Engineering at JPL”

The JPL Project Team of Jones, Jansma, Derro, Burns, and Blom

Jet Propulsion Laboratory (JPL)
Pasadena, CA 91109

2007 INCOSE International Symposium

“Systems Engineering: Key to Intelligent Enterprises”

Town and Country Resort
San Diego, CA
June 24-28, 2007

UPCOMING EVENTS

Friday, July 20 INCOSE Workshop

“Concept Design Affordability Simulation Workshop”

Hosted by PRICE Systems,
The Aerospace Corporation, and INCOSE-LA

Location

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

9 am to 4 pm

Tuesday, August 12 Speaker Meeting

“Principles of Complexity Theory Provide a Basis for System of Systems”

Dr. Scott Workinger, Sr. Associate,
Honourcode, Inc

Location

The Aerospace Corporation
El Segundo, CA 90245

Networking 5:30 pm
Presentation 6:30 pm

Reports from the 2007 INCOSE International Symposium

The 2007 INCOSE International Symposium was held on June 24-28 at the Town and Country Resort in San Diego. The theme of the symposium was “Systems Engineering: Key to Intelligent Enterprises.” The following contributions were submitted by INCOSE-LA members Scott Jackson, John Hsu, Sherry Pietras and Charles Baron.

Resilient Systems Working Group

The purpose of the Resilient Systems Working Group (RSWG) is to use systems engineering principles to enhance the resilience of systems to reduce the likelihood of and to recover from disasters. Resilience is the ability of organizational, hardware and software systems to mitigate the severity and likelihood of failures or losses, to adapt to changing conditions, and to respond appropriately after the fact.

The RSWG met in San Diego with strong attendance from South Africa, France and the USA. The WG reviewed two INCOSE products that are under way. One is the Expanded Bibliography which is a list of references and a brief discussion of why each one is relevant to resilience. This product is presently in the TLT (the INCOSE Technical Leadership Team) review process. The second INCOSE product is the Resilience Glossary. This product is in development.

The RSWG adopted two new products. First, the group concluded that the current version of the Systems Engineering Vision needed to enhance its discussion of humans in the system especially with respect to resilience. It was agreed that the group would prepare a draft to be reviewed by the group and to submit it to the Vision committee.

The second adopted product was a Resilient Systems Working Group vision. While the purpose of the group is captured in the group charter (<http://www.incose.org/practice/techactivities/wg/rswg/>), the vision would explain broader objectives, such as the interaction of the group with government and international agencies outside INCOSE and with other INCOSE working groups.

The interest in resilience spans many INCOSE members and working groups as reflected at IS07. First, a paper called “Resilient Systems: Capabilities, Culture and Infrastructure” was presented. Secondly, the Anti-Terrorism International Working Group conducted a panel called “Can We Have Systems Resilient to Natural Disaster Events and/or to Terrorist Attacks?” Finally, the Risk Management Working Group conducted a

panel called "Cultural, Psychological and Motivational Factors in Risk Management."

Finally, the group welcomed members of the Resilience Working Group of the Association Française d'Ingénierie Système (AFIS), the French equivalent of INCOSE. Since all members of AFIS are automatically members of INCOSE, the AFIS Resilience members will be added to the member list of the RSWG. Furthermore, RSWG and AFIS agreed to joint participation in the development of products.

Net-Centric Operations (NCO) Working Group had two successful meetings at the IS '07. We had about 30 attendees for the two sessions. Three task teams were formed: The 1st Team is to study the applicability of Architecture Reference Models to NCO, led by John Hsu; The 2nd Team is to report the rules/challenges to NCO, led by Duncan Kemp and The 3rd Team is to report the current NCO environments and situations, especially in Sweden and UK, led by Staffan Stromback. The reports from these three teams will be an Annex to the INCOSE Systems Engineering Handbook.

John Hsu presented a paper entitled "Modeling Emergent Behavior for System-of-Systems". Members are encouraged to read this paper since it addresses the paradigm shift from traditional systems engineering to the new branch of System-of-Systems Engineering

Town & Country was beautiful - like living inside a rose garden - so many flowers. The location was convenient with rail access and beach nearby (easy to find if your vehicle has GPS). As a room monitor for tutorials, the Metrics (F07 Tuesday) was quite popular, an estimated 75+ showed up. The passport option seems to be the favorite of the old timers / regulars (must be the best buy for the bucks); it's a convenient way to stock-up on tutorial materials. It was a difficult to choose between Working Group meetings or scheduled events - very busy as always.

The entertainment at the banquet was pleasant albeit similar to the Cirque du Soleil themes seen at Orlando and Toulouse in past years. On the closing day there was an interesting discussion about the makeup of our INCOSE leadership with respect to diversity, it was noted that networking within the organization has gender/race limitations. The Friday tour to the Fusion R&D site was interesting - the closer they come to higher return on energy efficiency the more technical challenges they face. Still there is conviction to achieve an international profitable plant design within 30 years or so. Thought provoking for next year's symposium theme topic.

Academic Forum - Jack Ring had best overall perspective on where we are and where we need to go. It requires continuous organizational commitments (paradigm shifts). So much material to review - so little time

"I wasn't sure what to expect from the INCOSE 2007 Symposium. My first, INCOSE 2006, was a bit like trying to take a drink from a firehose and I wasn't looking forward to a repeat.

To my surprise, this year's presentations were not only less overwhelming but also provided information that could be directly applied to my daily work. Have you ever tried to introduce systems engineering to a legacy program that has never known it? Introductions, it turns out, are the easy part; but try to implement and institutionalize the SE procedures you've carefully tailored for that specific program. "Kicking and screaming" barely describes the resistance you will meet.

June 12 Speaker Meeting Report

Advancing the Practice of Systems Engineering at JPL

The Project Team of Jones, Jansma, Derro, Burns, and Blom

**Jet Propulsion Laboratory
Pasadena, CA 91109**

ABSTRACT: In FY 2004, JPL launched an initiative to improve the way it practices systems engineering. The Lab's senior management formed the Systems Engineering Advancement (SEA) Project in order to "significantly advance the practice and organizational capabilities of systems engineering at JPL on flight projects and ground support tasks." The scope of the SEA Project includes the systems engineering work performed in all three dimensions of a program, project, or task:

1. the full life-cycle, i.e., concept through end of operations,
2. the full depth, i.e., Program, Project, System, Subsystem, Element (SE Levels 1 to 5), and
3. the full technical scope, e.g., the flight, ground and launch systems, avionics, power, propulsion, telecommunications, thermal, etc.

The initial focus of their efforts defined ten basic systems engineering functions at JPL. They also developed a list of highly valued personal behaviors of systems engineers, and are working to inculcate those behaviors into members of their systems engineering community. The SEA Project is developing products, services, and training to support managers and practitioners throughout the entire system life-cycle. As these are developed, each one needs to be systematically deployed. Hence, the SEA Project developed a deployment process that includes four aspects: infrastructure and operations, communication and outreach, education and training, and consulting support. In addition, the SEA Project has taken a proactive approach to organizational change management (OCM) and customer relationship management (CRM) – both concepts and approaches not usually invoked in an engineering environment.

The team of Jones, Jansma, Derro, Burns, and Blom jointly made this presentation that describes JPL's approach to advancing the practice of systems engineering at the Lab. It describes the general approach used and how they addressed the three key aspects of change: people, process and technology. It highlights a list of highly valued personal behaviors of systems engineers,

discusses the various products, services and training that were developed, and briefly describes the deployment approach used



BIOGRAPHIES: **Ross M. Jones** is the Project Manager for the Systems Engineering Advancement (SEA) Project at JPL. He is also the Systems Engineering Lateral Process Owner for the Engineering and Science Directorate, and the Assistant Division Manager for Systems Engineering in the Systems and Software Division at JPL. He began working at JPL 25 years ago,

starting in the Electric Propulsion Group and then moved to the Advanced Mission Concepts Group in the early 1980s. He was the spacecraft bus system engineer on the Mars Observer Mission before becoming the Supervisor of the Advanced Spacecraft Systems Group in the Systems Engineering Section. Jones formulated and led the effort to develop and use micro-spacecraft for JPL missions, and was the Project Manager of the MUSES CN Nano-Rover Project. More recently he was the Project System Engineer on the Mars Reconnaissance Orbiter Project and the Supervisor of the Project System Engineering Group. Jones has a B.S. from Purdue University, and a M.S. in Aeronautical and Astronautical Engineering from the Massachusetts Institute of Technology



P. A. "Trisha" Jansma is the Project Element Manager for the Deployment Element of the Systems Engineering Advancement (SEA) Project and for the Software Quality Improvement (SQI) Project at JPL. With over 30 years at JPL in both line and project management positions, she has a broad background in systems and software engineering in both engineering and scientific environments. Jansma has extensive experience in the management, design, development and delivery of cost-effective, software-intensive systems. She has experience in all facets of project life-cycle development, from initial feasibility analysis, proposal development and conceptual design through documentation, implementation, user training, enhancement and operations. Jansma has a B.A. in Mathematics from Point Loma Nazarene University, an M.S. in Computer Science from the University of Southern California, and an Executive M.B.A. from the Peter F. Drucker Graduate School of Management at Claremont Graduate University

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Mary Ellen Derro is a Senior Leadership and Organizational Development Specialist in the Professional Development Section of the Human Resources Directorate at JPL. She is trained in psychology and organizational behavior, and is completing an M.S. in Organizational Behavior. As a member of the People Element of the SEA Project, she developed the Systems

Engineering Competency Model, and serves as a behavioral coach to the SE OJT Program. Before coming to JPL, Derro worked as a management consultant for Right Management. Prior to that, she held numerous leadership positions in human resources at Bank of America.

Margaret J. "Peggy" Burns is a Technical Instructional De-



signer in the Technical Curriculum Development Group of the Professional Development Section in the Human Resources Directorate at JPL. As a member of the People Element of the SEA Project, she oversees systems engineering education at JPL. She also coordinates the software engineering education at JPL. She has worked at JPL for over 30 years, both as an employee and as a contractor in software development and line management positions. She has in-depth experience in implementing software products in support of the Deep Space Network (DSN). Her expertise includes systems and software development, testing, documentation and training. Burns has a B.S. in Computer Science from California State University at Northridge and an M.S. in Computer Science from West Coast University



Kristine A. Blom is the Project Element Manager of the Process, Product, Tools and Technology (PPTT) Element of the SEA Project. She has worked at JPL since 1974, and her experience includes systems engineering and instrument development on many projects including Voyager, VOIR/Magellan, Pioneer, and Space

Station, in addition to several DoD tasks. Also, she has held various management positions including Mission Operations Assistant Section Manager, and Mission Operations and Institutional Computing Division Technologist. She served 10 years as a member of JPL's Technology Board Executive Committee advising the Laboratory Director and upper management on technical issues. Blom earned a B.S. in Mathematics from California Polytechnic State University at San Luis Obispo, and has taken targeted graduate, technical and management courses at California Polytechnic State University, NASA/Wallops, NASA/Ames, JPL, Caltech, and UCLA

Friday, July 20 Workshop

Concept Design Affordability Simulation (CDAS) Workshop

Hosted by
PRICE Systems L.L.C.,
The Aerospace Corporation
INCOSE-LA

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

Registration – 8:00 a.m.
Workshop – 9:00 a.m. to 4:00 p.m.

\$50.00

(The registration fee can be applied towards your 2007-2008 INCOSE membership. Additional details are provided on the INCOSE-LA website.)

Continental Breakfast and Lunch will be served

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Tuesday, August 7 Speaker Meeting

Principles of Complexity Theory Provide a Basis for System of Systems

*Dr. Scott Workinger, Sr. Associate,
Honourcode, Inc*

**National University
Los Angeles, CA 90045**

**Networking 5:30 pm
Speaker 6:30 pm**

**Members Free
Guests \$10.00**

This workshop is intended to promote an awareness of:

- The costing challenges, shortcomings, and needs in early concept phase concurrent design activities, and
- The existing and emerging costing capabilities to deal with some of these challenges, shortcomings, and needs.

The workshop will be valuable to technical workers in concept design environments and to those working in the area of performance based cost modeling, sometimes called Affordability Simulation. The area of overlap between these two groups is Systems Engineering, or more generally, the systems approach to problem solving.

Affordability Simulation: Affordability Simulation is the use of mathematical modeling to predict the likely cost of something on the basis of performance cost drivers. For instance, affordability simulation of a system to detect specific signals over a specified area with a specified degree of accuracy within a specified time might estimate cost with a mathematical model that reacts appropriately to changes in performance variables like range, response time, and detection rate. Cost and system descriptions are usually at a high level (as compared to that of proposals), but not so gross as to be irrelevant. Because so many alternatives are available, software is most often used to host the mathematical models, which carries the beneficial byproduct of integrating directly with design, performance and effectiveness models used as tools within concept design environments.

Concept Design Environment: A concept design environment is usually a collaborative setting where engineers, program specialists, and perhaps customers work together to design new systems. Design decisions are made via real-time interaction among participants. The environment fosters rapid evaluation and expected effectiveness of all design alternatives considered. The Concept Design Center, established by the Aerospace Corporation 10 years ago, is a good example of a concept design center (for more information on The Aerospace Corporation's Concept Design Center, see <http://www.aero.org/publications/crosslink/winter2001/01.html>).

Deeper integration of Affordability Simulation into a Concept Design Environment has one goal – to more quickly drive decision making to design concepts that promise best value system effectiveness solution. The conceptual design study is the primary product of concept design. Since some studies demonstrate no affordable solution to a mission problem, a benefit to all is to arrive at the unaffordable conclusion as quickly as possible. Theoretically, this will enable more studies to be conducted and more capability to be realized over time. This workshop is a step to discovery of the proof of this theory. A series of six presentations by various professionals who have worked the problem will focus on CDAS methods, and a panel session at the end of the workshop will allow participants to ask questions of the presenters as a group.

ABSTRACT: Today's environments are dominated by complex Systems of Systems (SoS). As a result, systems engineers now have the challenge to create systems of unprecedented scope and complexity. The SoS environment is characterized by its own challenges, such as an extended life cycle, legacy systems as components, and ongoing re-architecting throughout the lifecycle of the systems and its component systems. Success under these conditions requires a sound design, managing complexity, maintaining the integrity of that design, and supporting shifting operational priorities over significant time pans while avoiding the lurking potential of chaotic conditions.

This short presentation describes how complexity theory, developed over more than 25 years, provides a theoretical basis for today's systems of systems by discussing:

- **System of Systems Concepts:** Examples of military and commercial SoS. What is a system of systems? What are its primary characteristics? Why does an SoS represent a paradigm shift?
- **Complexity Theory Applied to SoS:** Basic concepts of complexity. "The Edge of Chaos," and why this is a good thing. Nonlinear dynamics and increasing return, Small worlds and strange attractors, Patterns, Emergent properties, Self-organization. Examples of how these effects happen in real SoS. How systems engineers work with these effects and use them to help evolve the SoS



BIOGRAPHY: Dr. Scott Workinger is currently Senior Associate of Honourcode, Inc. He has 30 years experience leading organizations that create innovative, practical solutions to business problems and field working system in multi-disciplinary context. He has led multi-disciplinary analysis and innovative development efforts in complex, risk-laden environments in the fields of information technology (expert systems, operations analysis, CAD, collaboration technology), manufacturing (automotive, glass, optical fiber), and construction engineering (nuclear, pulp & paper). Currently he teaches courses on technical leadership, systems architecture, testing and evalua-

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tions, problem analysis and systems engineering and consults on strategic management and technology issues. The students in his continuing education courses come from a broad cross-section of backgrounds and include experienced leaders and technologists from such diverse backgrounds as the US Navy, NASA, pharmaceuticals, aircraft program management, and systems engineering consulting firms. Scott is a member of INCOSE and holds a BS in Engineering Physics from Lehigh University, an MS in Systems Engineering from the University of Arizona, and a Ph.D. in Civil and Environmental Engineering from Stanford University where he performed research at the Center for Integrated Facility Engineering on integration between engineering processes and design models. Scott has a passion for empowering next generation business processes through research, application, and teaching. His particular forte is the application of divers interdisciplinary resources to solve extremely challenging practical problems

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, August 3.

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.

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.

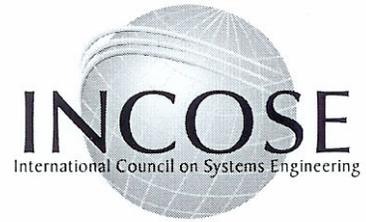
SPEAKER MEETING WEBCAST INFORMATION

Remote sites will be available for receiving the presentation via live webcasts. RSVP Required by August 3 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 sites. Check the INCOSE-LA website for current participating locations.

Message from the President

There will be a INCOSE-LA Board of Director's Meeting in the month of September. Any members-at-large that wish to attend the meeting are invited to contact Jim Manson, INCOSE-LA President, at president@incose-la.org.

The Board and Officers wish to welcome the following new members in the Los Angeles Chapter of INCOSE:		
Note: The information listed below is pulled 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
Ann Aldape	Systems/Process Engineer	The Boeing Company
Dr. Kurt Colvin	Professor	Cal Poly San Luis Obispo
Gill Cornell	General Engineer	Department of Defense (DoD)
Alberto Delgado	Systems Analyst	SPARTA, Inc.
Jose Garcia	Systems Engineer	The Boeing Company
Gary Goo	Corporate Engineer	LinQuest Corp
Dr Samantha Infeld	Systems Engineer	Jet Propulsion Laboratory
David Kelley	ITS Programs Manager	ScSc
Ned Morimoto	Systems Engineer Department Manager	Northrop Grumman Space Technologies
Janet Pingleton	Systems Engineer	Northrop Grumman Corporation
Hilda Sherman		
Brian Tankersley	Senior Software Engineer	Raytheon
Laura Tisinger	Systems Engineer	Northrop Grumman



2150 N. 107th St., Suite 205
Seattle, WA 98133-9009

May 23, 2007

James Manson
8716 Fillmore Circle
Buena Park CA 90620 USA

Dear James:

On behalf of the International Council on Systems Engineering (INCOSE), we are pleased to recognize the Los Angeles Chapter as a Gold Circle Award Chapter based upon its contributions and accomplishments in 2006. This annual award recognizes chapters reaching the highest goals and standards established by our organization.

For many, chapters provide the primary day-to-day interface with INCOSE. Chapters organize technical and social programs, communicate key information about our organization and discipline, support technical activities, and enhance the member experience by facilitating an open, inviting environment where members receive valued products and services that enhance their careers. In fulfilling this mission, Los Angeles Chapter leaders and members have committed significant time and energy to further the goals of our organization.

To honor these efforts and achievements, this Gold Circle Award will be presented at the 2007 INCOSE International Symposium in San Diego, California. In doing so, INCOSE recognizes and celebrates the contributions and achievements of the Los Angeles Chapter, its leaders, and its sponsors.

High quality, vibrant chapters are essential in INCOSE's drive to enrich, educate, and enlighten the INCOSE membership while improving recognition of INCOSE and the systems engineering profession. The Member Board and INCOSE extend heartfelt thanks and appreciation to the Los Angeles Chapter for its contributions towards attaining these goals.

Paul Robitaille
INCOSE President

Jim Armstrong
Member Board Chair

Gunter Daley
Member Board Co-Chair



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. 1, 2007

Acceptance notification: Jan. 3, 2008

Camera ready copy due: Feb. 1, 2008



Return Address:

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

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
Treasurer:	Marsha Weiskopf	marsha.weiskopf@aero.org or	treasurer@incose-la.org
Secretary:	Lee-Ann Seeling	lseeling@trichord.com or	secretary@incose-la.org
Membership:	Paul Cudney	paul.cudney@incose.org or	membership@incose-la.org
Programs/Speakers:	Jack Elson	jelson@nu.edu	programs@incose-la.org
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Tutorials/Education:	TBD	or	setraining@incose-la.org
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Technical Society Liaison:	Edmund Conrow	info@risk-services.com	
Chapter Recognition Chair:	Dana Pugh	Dana.N.Pugh@boeing.com	
Webcast Event Chair:	Benjamin Luong	Benjamin.Q.Luong@boeing.com	
CSER 2008 Conf. Mgmt Chair:	Malina Hills	malina.m.hills@aero.org	
CSER 2008 Conf. Cont. Chair:	Scott Jackson	jackessone@cox.net	

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.