NEWSLETTER

2008 President's Award for Most Outstanding Chapter

2002, 2004-08   2003

Election Special!

UPCOMING EVENTS

Holiday Party
An annual event featuring good food, good company, and a lot of fun with your systems engineer colleagues
WHEN: Saturday, December 5, 3:00 to 7:00 p.m.
WHERE: Susan Ruth's house in Whittier
See page 5 for details

December Speaker Meeting
"California Wildfires-Responding with Systems Engineering"
SPEAKER: Andre (AJ) Lee
WHEN: December 8, 2009, 5:30 to 8:00 p.m.
WHERE: The Aerospace Corporation, El Segundo
RSVP required; Remote sites available
See page 6 for details

INCOSE Webinar
"Architecting Resilient Systems"
SPEAKER: USC Lecturer Scott Jackson, INCOSE Fellow
WHEN: December 16, 2009, 8:00 a.m.
WHERE: On the internet at
http://www.incose.org/practice/webinars.aspx
See page 7 for more details
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SAVE THE DATE
INCOSE International Workshop 2010
WHEN: February 6-9, 2010
WHERE: Phoenix Marriot Mesa Hotel, Mesa, AZ
To register or for more details, go to:
http://guest.cvent.com/EVENTS/Info/Summary.aspx?i=f79fbe08-0b64-4d8a-b14f-745b55835caa

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For up-to-the-minute event details:
- *Check future editions of the*
- *Visit the INCOSE-LA website at www.incose-la.org*
- *Newsletter*

Voice Your Choice!!

The transition from 2009 to 2010 quickly approaches. Your 2009 Board of Directors (BoD) calls on you, the members of the Chapter, to take time to read your slate of candidates for the 2010 BoD. These candidates are presented to you on the pages that follow.

For those who are not familiar with the process of our Chapter elections, an explanation: the BoD consists of a "voting body" and an "appointed body." The voting body consists of ten positions, five of which are the "Executive Officers" and five of which are the "At-large Directors." The Executive Officers hold one-year terms while the At-large Directors hold two-year terms. The two-year terms are staggered to preserve Chapter knowledge from year to year. The appointed body consists of managers and chairpersons who are recruited to execute specific functions such as producing the *Newsletter* or the *Reflector*. Each functional area generally falls under the oversight of one of the directors. We want to stress the importance of the appointed body: it is the primary method for someone to engage in the operations of the Chapter and to progress into a position of the voting body.

An election committee reviews a preliminary list of names, which is constructed from the recommendations made by current and past officers, directors, chairpersons, and managers. Recommendations are based upon many factors that range from participation as an attendee (speaker meetings, tutorials) to volunteering in just about any capacity and who is willing to volunteer on the Board. Volunteer? Yes. As Paul Cudney, our Membership Director, so eloquently explained, "Serving on the Board is an excellent, low-risk method of gaining direct job-related experience." The committee then decides upon a slate of candidates.

It is now up to you, our members, to vote for the 2010 BoD. We proudly introduce to you our slate of candidates for next year's Board of Directors.

HOW TO VOTE:
Go online at www.incose-la.org.
Voting period: December 1-December 30

Rosalind Lewis
Candidate for President
(one-year term)

Rosalind (Roz) Lewis is the Principal Director of the Acquisition and Planning Subdivision at The Aerospace Corporation. In this position, Roz manages four departments that support a variety of program offices, corporate initiatives, and external civil and commercial customers. This support includes system reliability analysis; programmatic analysis and modeling to include cost, schedule, and risk analysis; and systems engineering and acquisition strategy development support.

Roz joined The Aerospace Corporation in 1987 as a member of the technical staff in the Computer Science Laboratory, where she developed software tools for experimental mission planning, upgraded a network resource scheduling system, and studied fault-tolerant methodologies. As a Senior Project Engineer in a program office, she led a multi-disciplinary effort to develop and deploy a digital imagery dissemination system. She was promoted to Senior Project Leader in the Air Force Satellite Control Network (AFSCN), where she studied the impact of GPS-aided satellite navigation on the AFSCN and supported systems engineering and integration activities for cross-segment initiatives. In 1999 she joined the RAND Corporation as a Senior Engineer, where she conducted and participated in studies regarding the acquisition, development, and use of space systems, including GPS and Galileo. Other studies and analyses concerned the development and applications of information and communication technologies in government and consumer environments.

Roz has been a participant in Chapter activities, most recently having served as the Moderator of the 2007 INCOSE-LA Mini-Conference.

Roz holds a B.S. from USC in Computer Science, an M.S. from Polytechnic University in Computer Science, and an M.S. in Systems Architecture and Engineering from USC.

Beth O'Donnell
Candidate for Vice-president
(one-year term)

Beth O'Donnell is a systems engineer in Affordability for Boeing's Phantom Works Strategic Projects and Analysis organization. Her experience includes affordability, cost-effectiveness, operations analysis, and trade study support for a variety of military and NASA proposals and programs, as well as for internal development projects. Beth has systems engineering experience in satellite, launch vehicle, and new space system programs as well as programs related to UAVs and missile defense.

Beth has been a member of INCOSE since 2004, and served as Secretary for the INCOSE-LA Chapter in 2008 and 2009. She participated in the committees for the 2007 and 2009 INCOSE-LA Mini-Conference and CSER 2008. In addition, Beth is involved in the INCOSE Space Systems Working Group and Cost Engineering Working Group.

Beth has a bachelor's degree in Industrial Engineering from Cal Poly, San Luis Obispo and a master's degree in Systems Architecting and Engineering from USC.

Joshua Sparber
Candidate for Secretary
(one-year term)

Joshua (Josh) Sparber has been very actively engaged on a daily basis in every aspect of systems engineering within his role for the Department of Defense for the last nine years on major space security programs, GMD and FAB-T. He earned his certification as Certified Systems Engineering Professional by 2007 and is currently both an active member of INCOSE and the American Institute of Aeronautics and Astronautics (AIAA).

After finishing a B.S. in Biology at the State University of New York (SUNY), Josh joined the service for three years and learned Air Radar Repair. Subsequently, he lived abroad for two years before making a home for himself in Southern California where he returned to working as an Electronics Technician full time while going to school, earning two accredited adult learner B.S. degrees, one in Medical Electronics and another in Computer Science. In addition, he attended Cal State, earning an M.S.E.E. while working full time and taking care of serious home responsibilities.

Last February, he helped plan and sponsor the third track of the INCOSE-LA Mini-Conference, *Evolving Systems*. He contacted the SCE EV lab in Pomona so the Southern California members can have opportunities to be involved with clean energy technology, a current personal pursuit of his and a possible opportunity rich area in the near future and the far future for the members. He participates actively in many of the BoD meetings as a member representative.

He sees the potential of INCOSE to be both a bastion for strengthening the professionalism of all members as well as a means for every single member to play some role, through our experience, training and imagination to advance both the science and the art of systems engineering. He envisions systems engineering as laying the foundation for all engineering in the current Millennium. His plan is to help support its professionalism and to expedite constructive efforts and goals.

Marsha V. Weiskopf
Candidate for Treasurer
(one-year term)

Marsha Weiskopf is a systems engineer at The Aerospace Corporation and has over 20 years of experience in both military and commercial communications systems. She joined The Aerospace Corporation in 1993 and is currently an office director in the Research and Program Development Office. She manages the company's IR&D program. Marsha has worked on several military and commercial spacecraft programs specializing in communications and systems engineering.

Marsha, an INCOSE member for over ten years, has been elected as the International INCOSE Treasurer for 2010. Her active involvement earned Marsha the Susan Ruth Award in 2007 for her commitment and volunteerism to the Chapter. She is the current Treasurer of the INCOSE-LA Chapter, a position that she has held for the past eight years.

Marsha received her B.S. from UCLA and her M.S. from USC, both in Electrical Engineering.

Shah Selbe
Candidate for
Ways and Means Director
(two-year term)

Shahed Selbe currently serves as a Liquid Propulsion Systems Engineer for Boeing Space and Intelligence Systems. His professional background includes working as a Special Technical Council at Vie Los Angles and as a Consultant Database Developer for Epsteen and Associates. He has received numerous Awards for extensive extracurricular and volunteer work at Boeing and the Association of Professors and Scholars of Iranian Heritage 2008 Academic Achievement Award.

A member of INCOSE since 2008, Shah played a key role in the 2008 Conference for Systems Engineering Research (CSER) and assisted the current INCOSE BoD by assuming the appointed role of Venue Chair. Several months after the successful delivery of CSER 2008, Shah accepted the challenge of leading the 2009 Mini-Conference Planning Committee. Working with the committee's technical chairperson, Dick Emerson, Shah naturally displayed a talent in leadership and management talent as he managed the planning committee of 10+ volunteers over a period of 6 months. Shah and Dick delivered the successful 2009 Mini-Conference "Enhancing Systems Engineering: Expanding Our Process to Meet Future Needs". A quick study, Shah Selbe has gained the knowledge needed to successfully serve as Ways and Means Director in 2010.

Shah has a B.S. in Chemical Engineering with a minor in Economics from the University of California, Riverside, an M.S. in Systems Architecture and Engineering from the University of Southern California, and a Certificate in Management Science and Engineering from Stanford University.

Shirley Tseng
Candidate for
Systems Engineering Education
Director (two-year term)

Shirley Tseng was elected to this office in 2008 and has returned to be re-elected for 2010-2011. Shirley has experience in space operations, ground systems, spacecraft systems, satellite networks with general systems engineering, software engineering, and system architecture. Shirley began her engineering career with satellite space operations and ground system development at GE (now Lockheed Martin Mission Systems). She joined Hughes Aircraft Corporation, Space Communication to work on MILSTAR Spacecraft systems engineering and Hughes New Venture Organization to work on satellite technology and business service development on emerging satellite services, such as XMRadio and Spaceway systems. With MorganFranklin, Shirley supports customers such as NASA, the Navy, and Missile Defense Agency (MDA) with advance technology support, space mission and data services development, DODAF and JCIDS development, architecture and system development, network architecture, and tool environment development.

Shirley actively keeps up with many disciplines with membership and participation in numerous organizations. Shirley joined the INCOSE-LA Chapter when it was first formed and is an active member attending most meetings and tutorials. Shirley has supported the prior two CSERs with publicity support.

Shirley is a graduate of the University of Pennsylvania with degrees in Systems Engineering and Wharton Economics.

Shirley is also a member of AIAA, IEEE, Association of Computing Machinery, SPIN, Association of Enterprise Architects, IASA (International Association of Software Architects), and user groups Java, Cisco, ITIL, BEA, and Linux. She is the Conference Chair for the AIAA Technical Committee on Space Operations and Support (SOSTC) and was formerly the AIAA Tools and Technology Chair. Shirley is on the Conference Committee for the IEEE Aerospace Conference and is the Communication and Navigation Track Chair for the conference.

Elected Board Members Returning in 2010

Membership Director
Programs Director
Communications Director

Paul Cudney, Membership Director, currently is a Senior Systems Engineer in the Requirements Verification and Test Organization with Lockheed Martin Integrated Systems and Global Solutions. He has over 42 years of experience performing software test and verification, and systems integration for real-time, ground-based control systems involving aircraft and satellites.

Paul has served as Chairman of the Los Angeles Chapter of the Association for Computing Machinery (ACM), and also as Chairman of the ACM Committee on Chapters. In addition, Paul is a member of the Steering Committee for the Southern California Software Process Improvement Network.

Paul has been an INCOSE member since 2000, was twice a Track Chairman at INCOSE-LA Mini-Conferences and once Secretary, and has served as Membership Director for the past several years. Paul vigorously supports activities to increase the knowledge and stature of our members, and seeks to increase member participation as a low-risk method of gaining direct job-related experience.

John Silvas, Programs Director, has been working at Booz Allen Hamilton for the last ten years, providing professional consulting services in the systems engineering functional areas of requirements analysis, architecture development, integration, technical management and control planning, and process improvements. Since moving from Virginia five years ago, John has emerged as a Space and Missile Systems Center (SMC) leader in developing Systems Engineering Plans (SEP) for various programs. He has successfully led or advised on such plans as the enterprise GPS SEP, Transformational Satellite Communication System Program SEP, Advanced EHF Satellite System (AEHF) Program SEP, MILSATCOM Wing SEP, Satellite Control Network Contract SEP, and Land-based Strategic Deterrent Program SEP. John's current role is Integration Lead for the Systems Engineering and Integration (SE&I) Contractor Team in support of the GPS Wing. In this role he is responsible for the orchestration of the SE&I team's efforts to integrate new segment functionality into the currently operational GPS system as well as for the planning and assurance that the GPS Wing delivers new integrated system capabilities to the user in the future.

As the Programs Director, John has utilized his extensive network in the aerospace industry to bring highly informative and cutting-edge systems engineering briefing topics to our Chapter. He feels strongly that the monthly speaker meeting is a key enabler for expanding the Chapter's membership as well as a highly effective vehicle for positively influencing engineers across multiple domains in southern California.

John, a member of INCOSE since 2005, is an INCOSE Certified Systems Engineering Professional (January 2006) with over 15 years of systems engineering experience. John presented an overview of the GPS SE&I contractor roles and functions for the INCOSE-LA September 2008 speaker meeting, which was well attended.

Prior to joining Booz Allen, John was in the U.S. Air Force during the first Gulf War, performing Signals Intelligence in support of various national objectives. His three-year active duty tour, plus five years of active reserve duty at the National Security Administration, provided him with a solid foundation in the Satellite Communications operations and intelligence analysis. John earned a B.S. in Industrial Design at Virginia Tech in May 1998. He is pursuing a master's degree in Systems Engineering. He has been married for over seven years to his wife Toni and is also a proud father of two boys, ages 17 and 2.

Edie Ung, Communications Director and Newsletter Co-editor, is currently the Operations Manager for the Integrated Technology Programs Focus Area Chief Engineers at Raytheon Space and Airborne Systems. She specializes in Enterprise Process Improvement. She has a diverse background including software engineering, systems engineering, configuration and data management for the government defense industry, and working with commercial industries in the development of banking systems and personal communication devices. Edie has earned a B.S. in Computer Science from Cal State LA and was a pre-med student at UC Irvine.

Upon joining INCOSE at the beginning of 2008, Edie took the opportunity to volunteer as the INCOSE-LA Newsletter Co-editor to better familiarize herself with the organization. Edie has further contributed to the Chapter by serving as the Communications Director to provide oversight to the Communications Sub-committees. Although she is still relatively new to INCOSE-LA, she hopes to leverage off the experience of long-time members to evaluate the current practices for communications and make improvements where needed to enhance relations with the member community. In addition, she wants to set an example to new members that it is never too soon to start getting involved!

Edie enjoys spending her time with her ten-year-old daughter and is actively involved in her community's youth softball league.

The Board of Directors wishes to welcome the following new members in 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
Jim Knapp	Senior Analyst	Tecolote Research Inc.
Calvin Miyazono	Group Supervisor	Jet Propulsion Laboratory
Nick Lardas	System Analyst II	Raytheon
Kevin Ferguson	Systems Engineer / Chief Engineer	Scitor Corporation
Cheri Settell	Engineer	USAF
Mark Foster	Mission Manager / Systems Integration	Orbital Sciences Corp
Sahar Yousef	Systems Engineer	Jet Propulsion Laboratory
Doug McCabe	Engineering Manager	Northrop Grumman Corporation
Eric Hoffman	Senior Associate	Booz Allen Hamilton
John Alexovich	Chief Technical Officer	LinQuest Corporation
Allen Levko	Principal Systems Specialist	LinQuest Corporation
Karen Jones	Technology Consultant	Consultant
Gary Moore	System Engineer	Scitor Corporation
Bill Nichols III	Senior Associate	Booz Allen Hamilton
Anthony Dao	Software Engineer	Northrop Grumman Corporation
Chad Garner	Jr. Systems Engineer	Experian
Jeffrey Johnson	Systems Engineer	Booz Allen Hamilton
Paulos Ashebir	Graduate Student	Loyola Marymount University

You are invited to the
INCOSE-LA Chapter Holiday Party
December 5, 2009
3:00 p.m. to 7:00 p.m.
at Susan Ruth's house in Whittier

Great People * Fine Food * Lots of Fun * White Elephant Gift Exchange

No cost for the INCOSE-LA member and one guest
(bring a gift for the White Elephant gift exchange)

R.S.V.P.

registration@incose-la.org
with subject line
"INCOSE-LA Holiday Party"
Directions to Susan's home will be provided as
an acknowledgement of your R.S.V.P.
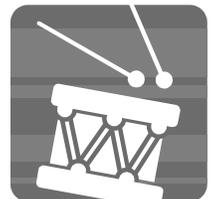
December Speaker Meeting
California Wildfires—Responding With Systems Engineering
Presented by Andre (AJ) Lee

Particulars
WHEN: Tuesday, December 8, 5:30—8:00 p.m.
WHERE*: The Aerospace Corporation
2350 East El Segundo Blvd., El Segundo
Bldg A3/ Dining Rooms A&B
Remote sites will be available.
COST: Members-FREE; Non-members-$10.00

ABSTRACT: Large-scale crisis incidents involve a complex response, especially when geographically wide and populous areas are impacted, as is the case with Southern California wildfires. The coordination of response assets deployed into the impact zone, in addition to the outgoing flux of those fleeing the danger, requires achieving a balance between organized chaos and command and control.

By applying systems engineering to emergency response, we can look at the operations from a system and subsystems perspective, identifying critical interface integration, and enhanced orchestration of equipment, personnel, communications, and mass casualty management. In addition, lean and quality based methods can help to increase the efficacy of readiness activities and streamline deployment activities while anticipating operational risks.

While large scale incidents are overwhelming in their size and consumption of resources, systems engineering offers a framework for optimizing outcomes.

BIOGRAPHY: Andre Lee has maintained a longstanding involvement with both technical and emergency services fields. As a reservist and Telecommunications Officer, Andre has spent the past 8 years working in technical management of civilian – military operations under federal response agencies including the Department of Homeland Security and FEMA. Andre has held key positions on mass casualty events with local, state, and federal public safety agencies throughout the U.S., including joint operations with the Army and Air Force. Andre has deployed to nationally declared disasters, including Hurricanes Ivan, Katrina, Rita, and the Southern California firestorms.

In addition, Andre is an adjunct faculty member at Loyola Marymount University and El Camino College. Areas of research include leveraging technology to improve emergency response, including ad hoc/ mesh networks, mobility solutions, and unified communications, for austere and fixed environments. He has also served in consulting and project management capacities for diverse industries including medical, government, entertainment, public safety, and academia. Andre presented at the 2009 INCOSE-LA Mini-Conference in the area of non-traditional applications of systems engineering.

Andre is an alumnus of Loyola Marymount where he received his master's degree in Systems Engineering, and bachelor's degree in Information Systems and Quantitative Management. Andre enjoys mountain biking and serving as a volunteer firefighter and EMT, and he is a mentor for FIRST Robotics.

AGENDA:
- 5:30 - 6:20p.m. Registration, Networking
- 6:20 - 6:30p.m. Welcome & Announcements
- 6:30 - 7:45p.m. Presentation followed by questions and answers

RSVP: <u>ALL PARTICIPANTS</u>
RSVP/Register online at www.incose-la.org or email to registration@incose-la.org (please include "INCOSE-LA December Mtg" in subject line). See additional requirements below depending on location you plan to attend.

Host Site RSVP: Please complete RSVP (U.S. citizens and resident aliens) by Thursday, December 4 (foreign nationals by Tuesday, December 1). You MUST RSVP to attend. NO EXCEPTIONS. If you are uncertain whether or not you'll be able to attend, DO make a reservation and indicate that you're uncertain. Please bring your picture identification (driver's license, passport and/or green card) to the meeting.

Remote Site RSVP: RSVP for remote sites can be made on the INCOSE-LA website or email to registration@incose-la.org (please include "INCOSE-LA October Mtg" in subject line) – identify at which remote site you will be attending -- or by alternate method if listed below:
- Antelope Valley/Palmdale - no deadline. Contact Mike Wallace at 661.540.0290 or m.wallace@ngc.com
- Boeing, Huntington Beach - RSVP by one (1) day prior to meeting. Refer to Boeing Southern California LTS internal website or contact Beth O'Donnell at elizabeth.l.o'donnell@boeing.com
- Pasadena, JPL – RSVP by one (1) day prior to meeting. Contact Chris Delp, 818.319.3251 or christopher.l.delp@jpl.nasa.gov

DIRECTIONS to Host Site: From the 405 Fwy head west on El Segundo, left on Douglas, left into the first gate on the left and drive straight past the parking structure and park. Enter and badge in through the South Lobby (east of the large building ahead on the left as you enter the gate); we meet in Dining Rooms A&B.
--- Site contact: Susan Ruth, phone 310.336.6765, email susan.c.ruth@aero.org

* Substantial refreshments will be provided at the host site. (Refreshments may not be provided at remote sites, or may be provided at no charge. Contact Remote Site POCs for more information.)

INCOSE WEBINAR
Architecting Resilient Systems
Presented by Scott Jackson

Particulars
WHEN: Wednesday, December 16, 8:00 a.m. PST
General Webinar Details:
http://www.incose.org/practice/webinars.aspx

ABSTRACT: The concept of resilience has reached maturity over the past decade. There is general agreement on the definition of resilience and its attributes. The Resilience Engineering Network (www.resilience-engineering.org) has pioneered this work. Authors such as Erik Hollnagel and David Woods have written extensively on the subject. The book *Resilience Engineering: Concepts and Precepts*, Ashgate Publishing Company, UK, 2006 is one of the first major publications. The IEEE Systems Journal has devoted a whole issue to the subject. The University of Southern California (USC) teaches a graduate course called Architecting Resilient Systems in which the book of the same name by the presenter is used.

The resilience community agrees that resilience architecting (also called resilience engineering) occurs over the three phases of a disruption. In the pre-disruption phase the system should take steps to anticipate the disruption and avoid the disruption, if possible. In the survival phase the system should absorb the disruption so that it can recover in the recovery phase. In the recovery phase the system resumes some degree of its original goals, including the survival of the humans in it.

The nature of disruptions is discussed. Disruptions are the initiating event that may lead to a catastrophic event. Human error is a common source of disruption. However, the resilience of the entire system will determine whether the system is prone to catastrophe. Disruptions may be either external, such as terrorist attacks or natural disasters, or they may be internal, such as human or software errors. The phenomenon in which systems fail when the components function as designed is discussed.

Resilience has four primary attributes: capacity, flexibility, tolerance, and inter-element collaboration. This webinar presents approximately 40 heuristics for the achievement of these attributes.

Capacity requires that the system be sized to handle the maximum and most likely events, such as terrorist attacks and natural disasters. However, a system cannot depend on capacity alone; the other attributes must be present to handle unpredicted events. Capacity includes functional redundancy.

Flexibility requires the system to be able to reorganize. For example, plans must be in place to allow the command and control to shift upwards in the event of a serious disruption, such as a terrorist attack.

Tolerance allows the system to degrade gracefully in the face of an attack. That is, all resources would not become inoperative after the first strike.

One of the most important resilience attributes is inter-element collaboration. This attribute allows all elements of the system to interact and cooperate with each other. The New York Fire Department had excellent collaboration with the police, the military and the power company after the Twin Tower attacks. On the other hand, the city of New Orleans lacked this attribute after Katrina. This lack of resilience is called brittleness.

In addition to these attributes, a resilient system needs at least two other features: a resilient culture and a serious risk capability. Numerous case studies have shown culture and a lack of attention to risk to be primary causes of brittleness. Although the search for methods to achieve cultural change is still under way, the short term approach is to employ extensive reviews of critical issues. Many brittle systems—for example, Challenger, Chernobyl, etc.—have suffered from a lack of a risk process and the will to employ one; this is another critical function. Research has shown that a serious risk process will go far beyond traditional approaches.

In summary, the attributes of resilience are well-defined. Finding the most cost-effective ways to measure them, to incorporate them into a system, and to fund them is the major challenge. The Infrastructure Security Partnership (TISP) (www.tisp.org) on which the presenter serves is moving forward to answer these questions.

To say that resilience is well-defined is not to say that the work is finished. There is still much to be learned to accomplish the goals of resilience. Areas of major research include, but are not limited to, the application of resilience in both political and economic environments.

BIOGRAPHY: Scott Jackson is a lecturer at the University of Southern California in the Systems Architecting and Engineering Program, where he teaches courses in Architecting Resilient Systems, Systems Engineering Theory and Practice, and Systems Engineering Management. Scott is author of *Systems Engineering for Commercial Aircraft*, published by Ashgate Publishing Limited in 1997. He has also authored many papers for INCOSE, AIAA, and IEEE. He is the author of the book *Architecting Resilient Systems: Accident Avoidance and the Survival and Recovery from Disruptions* recently published by John Wiley and Sons, Hoboken,, NJ. Within INCOSE, Scott is an INCOSE Fellow and the Chair of the Resilient Systems Working Group.

Instructions for viewing the webinar are found in the joining instructions on the INCOSE Connect website, in the Webinar Discussion Forum area:

h t t p s : / / w w w . i n c o s e . o r g / f o r u m / i n d e x . c f m ? page=forum&forumID=8

"I would regard it as the greatest treachery on my part if, in embarking on a new domain of knowledge, I accepted any foregone conclusions."
   —From Niels Bohr in a letter to Albert Einstein, circa 1920

Return Address:

800 S. Pacific Coast Hwy. #8-205
Redondo Beach, CA   90277

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:

2009 Board of Directors and Appointed Positions

Elected Officers

President:	Eric Belle	eric_c_belle@raytheon.com	or	president@incose-la.org
Vice-President:	Rosalind Lewis	rosalind.lewis@aero.org	or	vicepresident@incose-la.org
Past President:	John David Boyd	john.boyd@incose.org	or	pastpresident@incose-la.org
Secretary:	Beth O'Donnell	elizabeth.l.o'donnell@boeing.com	or	secretary@incose-la.org
Treasurer:	Marsha Weiskopf	marsha.weiskopf@aero.org	or	treasurer@incose-la.org

Elected At-Large Directors

Membership:	Paul Cudney	paul.cudney@incose.org	or	membership@incose-la.org
Programs:	John Silvas	silvas_john@bah.com	or	programs@incose-la.org
Systems Engineering Education:	Shirley Tseng	shirleytseng@earthlink.net	or	setraining@incose-la.org
Ways and Means:	Dana Pugh	dana.pugh@incose.org	or	waysandmeans@incose-la.org
Communications:	Edie Ung	ma1teez@yahoo.com		

Appointed Positions

Newsletter Co-editors:	Edie Ung, Jorg Largent	ma1teez@yahoo.com	or	Palmdalejorg@aol.com
Newsletter Production Manager:	Lee-Ann Seeling	Lee-ann.S.Seeling@raytheon.com		
Reflector Manager:	Susan Ruth	susan.c.ruth@aero.org		
Industrial Relations Manager:	Jose Garcia, Jr.	jose.s.garcia-jr@boeing.com		
Technical Society Liaison:	Edmund Conrow	info@risk-services.com		
Chapter Recognition Manager:	Michael Maar	michael.c.maar@boeing.com		
Lead Site Coordinator:	Anna Warner	anna.warner@boeing.com		
Webcast Event Manager:	Chris Delp	cldelp@jpl.nasa.gov		
Website Content Manager:	Communications Director			
Website Technical Manager:	Benjamin Luong	Benjamin.Q.Luong@boeing.com		
2009 Mini-Conference Chair:	Shah Selbe	shah.selbe@boeing.com		
2009 Mini-Conference Technical Program Chair:	Dick Emerson	r.emerson@computer.org		
Venue Chair:	Shah Selbe	shah.selbe@boeing.com		
Representative to San Fernando Valley Engineers' Council:	Stephen Guine	Stephen.Guine@ngc.com		

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.