

Los Angeles Chapter of INCOSE
www.incose-la.org

COMING EVENTS

Tuesday, September 10
Dinner Meeting

Theme
 Panel Discussion
 University programs on Systems Engineering

Location
Aerospace

Tuesday, October 1
Dinner and Magic

Location
Magic Castle

Saturday, October 19
Tutorial

Knowledge Engineering for Systems Engineers

Tutorial Leader
 John Velman

Location
Los Angeles Airport Radisson Hotel

Tuesday, November 12
Dinner Meeting

Guest Speaker
 To be announced

Location
van Karman Auditorium
JPL

Special Note:

Nomination and Elections for 2003
Board of Directors and Officers

If you are interested in running for a position on the Board of Directors or becoming an Officer for the Los Angeles Chapter of INCOSE please send Katy Kuey an email expressing your interest

(See back of newsletter for the various positions)

The Chapter constitution and bylaws are on our website for details on the duties of each position.

katy.kuey@lmco.com

Issue No. 5

September, 2002



From the President
Hearing from our members
Michael E. Krueger

The LA Chapter is publishing featured article on appropriate Systems Engineering topic in our newsletter, written by our members. If you would like to provide a brief article on a systems engineering topic areas please send it to me and we try to get it published in one of the upcoming newsletters.

Katy Kuey has provided this month system engineering article.

INCOSE 2002 Concluded

The 12th annual International Symposium began on Sunday, 28 July and successfully concluded on Thursday, 1 August at the Riviera Hotel and Casino in Las Vegas. This year's "Engineering 21st Century Systems: Problem Solving through Structured Thinking" theme attracted conference attendees, exhibitors, and 93 guests totaling 960 people from around the globe. INCOSE 2002 Symposium was at the same time productive and entertaining. The following are some of the highlights of the conference.

Keynote Speakers

Tuesday, Peg Billson a senior executive from Honeywell gave a well-received keynote speech.

Wednesday, Virginia Dunstone woke people up with her energizing speech about looking at the body and brain as a highly interactive system. Her two-hour work shop following her speech was interactive and very insightful.

Thursday, Our own Disney Imagineering's Executive Systems Engineering Director, Ken Salter, gave us a glimpse of system engineering applications at Walt Disney.

Panels

Panel discussion was an emphasis in this year's symposium. Panels were given on a variety of topics from Intelligent Transportation Systems, Telemedicine, and Mining. Over 10 provocative international panels were presented. Academic Forum was a big success.

Tutorials

The optional Monday tutorials were all well-attended. The free System Engineering Fundamentals tutorial had well over 170 attendees.

Exhibitors

If you are curious which vendors exhibited, look for INCOSE 2002 Exhibitors in <http://www.incose.org/symp2002/exhibitors/exhibitors.htm>.

Awards

INCOSE Founders Award was given to Jeff Grady of JOG System Engineering and Sarah Sheard of Software Productivity Consortium.

INCOSE Fellows were awarded to Bill Mackey of Computer Science Corporation, Donna Rhodes of Lucent Technologies, and Dinesh Verma of Stevens Institute of Technology.

Stevens Institute's first System Engineering Doctoral Fellow Recipient is Vassilis Agouridas.

Attendees

There were 867 attendees at the Symposium, 707 represented the United States. New chapter in South Africa was formed. INCOSE 2002 was hosted by the following Southwest US Region II Chapters: Central Arizona, South Arizona, Inland Empire, Los Angeles, San Diego, San Francisco Bay Area, Colorado Front Range, Silver State, and Wasatch.

You may catch INCOSE 2002 The Week in Pictures highlights via <http://www.incose.org/sympos/is2002-highlights.ppt> or browse through by day and event via <http://www.incose.org/pictures/symp2002>.

Future INCOSE Symposiums and Events <http://www.incose.org/ann.html>

INCOSE 2003 "Engineering Tomorrow's World Today" will be held in Washington, D.C.

29 June – 3 July 2003 at the Crystal City Hyatt Regency
Call for papers is out, draft papers due 1 November 2002
See Website for details: www.incose.org/symp2003

INCOSE 2004 "Systems Engineering, Managing Complexity & Change 21-24 June 2004, Toulouse, France

What's INCOSE Doing to Improve?

A Strategic Planning Activity has been Started, Products include:

- INCOSE Strategic Directions Document Update
- INCOSE Technical Vision
- Strategic Implementation Plan (Our Operating Plan)

Organizational changes:

- Creation of a Member Board
- Creation of 2 new positions: Director of Strategic Planning and Director of Communications and Marketing.

Updating of the INCOSE Website
Establishing a Web-Enabled SE Process Asset Library
Extending our Liaisons with other Industry Societies & Universities
Actively looking to expand our membership into new countries and domains

How Can We Be of More Help To INCOSE? - Get Involved!

- There are 8 open leadership positions in the Tech Board
- There is a an open co-chair position in the CAB
- There are many more openings within the Technical Committees and Working Groups

CAB Representatives have been encouraged to get INCOSE members within their organizations to participate in the associated Technical Board projects so products of value get developed in a timely manner

Additionally, if your organization has non-proprietary assets of value to other practicing SE's, nominate them for inclusion in the INCOSE System Engineering Body of Knowledge (SEBOK).

- Have a job opportunity to announce or looking for new opportunities? Subscribe to our newest mail list. The guidelines for this list are:
- Members and Non-Members can post job opportunities and resumes.
- List restricted to jobs in the following areas: Systems Engineer, Project Engineer, Project Management, etc.
- No email attachments will be permitted. Embed the job description or resume in the text or offer to email an enclosure upon request.

SE Handbook Revised and Available for Download (posted June, 2002)
INCOSE members may download a copy of the recently released Systems Engineering Handbook free of charge. Click on the Members' Area link located to the left and above this announcement. The handbook in hardcopy is also available for purchase from the INCOSE Office. Non-members can also purchase the handbook in softcopy (a download from our web site).

Lead a Working Group, Interest Group, or Technical Committee

The INCOSE Technical Board has additional openings after having filled several positions from the April announcement. Current members having interest in assuming one of these positions, please contact Tech Board Chairman William Mackey by e-mail at wmackey@csc.com or by telephone at +1 301-921-3082.

- Tools Database WG Chair
- Verification and Validation IG Chair
- Configuration Management IG Chair
- SE Body of Knowledge Chair
- IEEE Voting Systems Liaison
- SE Applications Profile Editor
- Education Development Co-Chair
- Education Measurements Co-Chair
- SE Certification Co-Chair
- Evaluation WG Co-Chair

Katy

Note from M. Krueger:

Special Thanks to Tom and Katy

The Los Vegas Symposium was very successful. On behalf of our Chapter, I want to thank Tom Kudlick and Katy Keuy for the outstanding job they did in taking the lead for our Chapter in pulling together the Exhibitors. We met our goal in the number of Exhibitors and the comments from the exhibitors on the Symposium and visibility to decision makers was the best they have seen at an INCOSE symposium.





**Academic Panel
Moderator
Scott Jackson
Boeing and USC**

Systems engineering is taught in various Southern California universities in various ways. Sometimes it is a graduate program, sometimes part of an undergraduate program, and sometimes an extension program. We have invited speakers from seven of these universities to talk about their programs. First,

they will discuss the details of the programs, whether it is a degree, certificate or other option. Secondly, they will discuss the philosophy of the program. For example, are they industry oriented or do they do original research? Do they view systems engineering as an expanding discipline, and what is their method for introducing new material into their curriculum?

Panelists (alphabetically):

Elliot Axelband – University of Southern California.

Dr. Axelband is Research Professor, USC, in the Dept. of Electrical Engineering-Systems. He is also Director, USC Graduate Program in System Architecture and Engineering. He is a Senior Resident Advisor, RAND Corporation. He is a member, Board of Governors, IEEE Aerospace Electronics Systems Society and Associate Editor, INCOSE (International Council on Systems Engineering) Journal. He is a Director, Legacy Engineering LLC Director, Dataraid Inc. Finally he is a member, Systems Engineering Steering Committee, NDIA

George Clark – California State University in Long Beach

George L. Clark, Jr. is the manager of the Laser, Sensor, and Propulsion Systems Department of TRW Space & Electronics, where he specializes in the field of ballistic missile defense. He has taught aerospace systems engineering for six semesters in the Department of Mechanical and Aerospace Engineering at California State University Long Beach. Dr. Clark received his Ph.D. in Mechanical Engineering from the University of Illinois at Urbana-Champaign in 1982 and is an instrument-rated Commercial Pilot. He was a member of the flight crew for the Perseus A and B UAV flight tests at the NASA Dryden Research Center and is an active member of INCOSE and the Society of Flight Test Engineers. His email address is george.clark.jr@trw.com.

John Clymer – California State University in Fullerton

John R. Clymer is a professor of electrical engineering at California State University Fullerton (CSUF) and consults in the area of systems engineering, simulation, and artificial intelligence. In addition to consulting, he presents intensive short courses at various locations around the United States and abroad. He received his Ph.D. from Arizona State University in 1971. His teaching assignments have included computer engineering, system control, continuous systems simulation, operational analysis and DES simulation, optimization and mathematical programming, and artificial intelligence (fuzzy logic and control, neural networks, and expert systems

Karen Miller – Loyola Marymount University

Dr. Miller has been the Systems Engineering adjunct professor at LMU for the past five years. Systems Engineering is a part of two graduate programs: Mechanical Engineering and Production Management. Dr. Miller is a systems engineer at Northrop Grumman and is responsible for Life Cycle Cost on the F/A-18 program in El Segundo. She has also taught at the graduate level at several local universities such as USC, Webster, West Coast, and Northrop University. Prior to joining the F-18 program, she was a project manager on the B-2 and Peacekeeper programs. Currently, she is leading Lean Workshops for Northrop.

Joel Sercel – California Institute of Technology

Joel C. Sercel, Ph.D. is the Director of Caltech's Laboratory for Spacecraft and Mission Design, a facility and research group dedicated

to teaching, tool development, and research in the area of collaborative design of space missions and systems. Sercel, also a Caltech Lecturer in Aeronautics, recently left JPL where he had a 15 year career in diverse areas including space technology development, system engineering, software development, and management.

Samuel Son – University of La Verne

Mr. Son has an M. S. in Information Systems and is a Ph.D. candidate in Information Systems at Claremont Graduate University. He also has a B. S. in Mechanical Engineering from California State University in Long Beach and an M. S. in Systems Engineering and Management from USC. He teaches Systems Engineering, Systems Analysis and Design, and Project Management classes at the University of La Verne.

Mario Vidalon – University of California in Irvine

Mario Vidalon is Director of Business Development & Corporate Training for University of California, Irvine Extension. Since 1993 Mario has established UCI's Systems Engineering Extension Program to teach current industry-best-practices methodologies for the solution of complex, heterogeneous systems problems over a broad range of application domains. Formerly, Mario was the engineering manager of Systems Development and Database Applications at McDonnell Douglas Corporation in Saint Louis, Mo. Other experience include system engineer with RCA, David Sarnoff Research Institute, Princeton, New Jersey. Mario has a Ph.D. in Electrical Engineering from University of Windsor, Canada, and M.S. & B.S. in Mathematics from Saint Louis University, St. Louis, Mo.

Tom Mincer – California State University in Northridge

Dr. Mincer initiated the use of EXCEL Spreadsheets in the curriculum at CSUN by integrating it into the courses on systems design, computational methods and computer-aided-engineering. For the past 10 years he has worked extensively in the areas of systems design, simulation and optimization using the Excel Structured Spreadsheet environment. He has taught this workshop over 100 times to over 1,500 engineers, including 29 On-Site Sponsored sessions. He was a member of the Advanced Projects Numerical Analysis & Simulation Team at Rocketdyne. During this time he worked extensively on many space projects including Mercury, Gemini, & Apollo as well as advanced planning projects. Team experience included proposal development, feasibility studies, new concept development, and trouble-shooting problems in rocket engine development, systems trade-off studies, and management decision support. Extensive use of numerical computational methods were utilized in studies of thrust vector misalignment, rocket plume impact at high altitudes, micro-meteor impact, all aspects of cooling methods for small attitude control rockets, systems analysis & pressure feed systems.

INCOSE News

Return Address:

**2118 Colony Plaza
Newport Beach, CA
92660**

#5

Issue

4

2002

Sep'

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:

President:	Michael E. Krueger – michael.krueger@ase-consult.com
Vice-President:	Katy Kuey – katy.kuey@lmco.com
Past President:	Dave Beshore – David_G_Beshore@raytheon.com
Treasurer:	Marsha Weiskopf – marsha.weiskopf@aero.org
Secretary:	Scott Jackson – scott.jackson@boeing.com
Membership:	Susan Ruth – susan.c.ruth@aero.org
Programs/Speakers:	Michael L Dickerson – michael.dickerson@jpl.nasa.gov
Ways and Means:	Thomas Kudlick – synchrocubed@aol.com
Tutorials/Education:	Saul D. Miller – saul.miller@aero.org
Communications:	Ronald Williamson - ronald.w.williamson@aero.org

Those interested in INCOSE membership please contact contact Susan Ruth.
Those interested in working on a committee please contact the appropriate Director.