

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

COMING EVENTS

Saturday, March 29th
Tutorial

Systems Architecting

LECTURER

Dr. Mark Maier

Location

Radisson Hotel
 Los Angeles Airport

Wednesday, April 9th
Dinner Meeting

C4ISR Architecture Framework

Speaker

Arthur Nimz
 Lockheed Martin

Location

The Aerospace Corporation

Tuesday May 13th
Dinner Meeting

Panel on SE tools
 Location TBA

June
Miniconference

Mark your calendar
1 day Miniconference
Multi-track
Featured Keynote Speaker

INCOSE 2003
13th International Symposium
June 29 to July 3, 2003

Location

Hyatt Crystal City
 Washington D.C

Engineering Tomorrow's World Today!
WWW.INCOSE.org

Issue No. 3

March, 2003



From the President
What is new from the International Workshop?
Michael Dickerson

At the start of February the International Workshop was held in Tampa. As the President of the LA Chapter I had to make sure that we were represented. Michael Krueger and several other LA members were in attendance.

The latest new item is that INCOSE has now started a process to get a certification for Systems Engineers through INCOSE. The results of the elections for the new membership board we completed and the new membership board was installed. Several new associations with other professional organizations were proposed.

The certification process has started with INCOSE talking with ABET (Accreditation Board for Engineering and Technology). It is planned that it should take about a year for INCOSE to complete the membership requirements to become part of ABET. Part of the process will be having several periods of testing of present Systems Engineers to develop a set of knowledge that all systems engineers should have yet not so universal that it means nothing to have the knowledge. You will be here more and if given the chance should participate in helping.

The new membership board has started which now gives a path for all members to have voice into the Executive Board. I think this is important because I always ask what INCOSE is doing for the members not just the Corporations that hire systems engineers. A year from now we should be able to see what impact this will have on how the members are being served.

Because of the growth and stability of INCOSE the board of directors has hired a consulting group to look at the possibility of having a fulltime management group like other societies. At the Symposium in DC there will a report on feasibility.

Local Chapter Events!

We had a great panel in February. Several of the Universities and Companies provided input into what they were doing and needed for systems engineering. It was a nice follow on to a panel we had last September. I was impressed with the audience interested and questions. One of the most interesting items was one of the schools presented information on the number of systems engineers from Boeing in different parts of the country. It turned out that in southern California there were around 1700. Then next closest area was around 400. When we look at all of the companies in our area there are near 10000 people who do systems engineering. Our present chapter membership is between 200 and 300 people. These people are taking advantage of the training that we have in southern California. It was exciting to see what is happening in industry and education.

Next month we have a systems architecting tutorial by Mark Maier, which should be an excellent tutorial. We also have Arthur Nimz coming to talk about C4ISR in April. Finally, we have started in a big way to prepare for you mini-symposium. Dennis Schwarz is the person in charge this year and needs your help. He could use some volunteers to be ready by June for the symposium. If you could help, let him know at dennis.c.schwarz@boeing.com. His committee meets by phone every Tuesday at 8 am.

We have ask that each of the board members have a committee. If you would like to be part of the LA Chapter please volunteer by sending email to the committee you would like:

president@incose-la.org
 vicepresident@incose-la.org
 treasurer@incose-la.org
 secretary@incose-la.org
 membership@incose-la.org
 programs@incose-la.org
 pastpresident@incose-la.org
 setraining@incose-la.org
 waysandmeans@incose-la.org
 communications@incose-la.org

Each of these titles has a group of activities that they are responsible to make sure the events happen. You are welcome to help.

Michael L. Dickerson

Dinner Meeting
 Wednesday, April 9, 2003

Location
 Aerospace Corporation

C4ISR Architecture Framework
Arthur Nimz
Lockheed Martin Corporation

With over 20 years of defense industry experience in the Systems Engineering of Communications and Command and Control Systems, Arthur Nimz is an industry expert on the C4ISR/DoD Architecture Framework. A certified C4ISR/DoD Enterprise Architect, Mr. Nimz is Manager of Joint C4ISR Programs for Lockheed Martin Naval Electronics and Surveillance Systems – Surface Systems and the C4ISR/DoD Framework Lead Architect for Lockheed’s Network-Centric Systems and Advanced Naval Programs organization. Recently, he was directly responsible for architecting, designing, documenting and costing a functional C4ISR communications system design as part of the US Coast Guard’s Integrated Deepwater System. He has also applied his expertise to developing methodologies and processes in support of the US Navy’s Joint Command & Control Ship JCC(X), Deployable Joint Command and Control (DJC2), Naval Fires Network (NFN), FORCEnet, and is responsible for Global Information Grid (GIG) architecture development efforts. Mr. Nimz is currently involved in research and development of a Reflexive Architecture Framework for use in developing software-executable architecture models as a companion to the DoD Architecture Framework static/dynamic models. The Reflexive Architecture Framework uses a Sense-Decide-Act operational behavior paradigm to characterize the performance necessary for operating inside an adversary’s operational tempo.

Mr. Nimz was formerly Lockheed Martin’s Project Manager for the GPS IIR Operational Support System (OSS) where he was responsible for designing and building the OSS, a secure telecommunications network essential for supporting the GPS IIR program. He also applied his architecture expertise to designing and implementing a multi-layered interface that allowed Boeing North America’s Integrated Mission Operations Support Center (IMOSC) to mitigate Y2K compliance issues, resulting in a significant cost savings to the USAF and preserving Boeing’s GPS II/IIA mission operations support capabilities into the new millennium. Mr. Nimz is Lockheed’s Lead Trainer on C4ISR Architecture Framework Implementation and has delivered hundreds of hours of training on the subject to various levels of staff engineers and management.

Register Now Systems Architecting Tutorial Guest Lecturer Dr. Mark Mair

TUTORIAL: Systems Architecting

DATE: Saturday, March 29, 2003
 (Reservations by March 8)

TIME: 8:00 AM to 5:00 PM;
 Registration begins at 7:30 AM

LOCATION: Radisson Hotel at Los Angeles Airport
 6225 West Century Boulevard
 Los Angeles, CA 90045
 (310) 670-9000

TOPIC: Systems Architecting

Systems architecting is the art and science of developing system solutions, with a strong focus on the “up-front,” ill structured phase of system development. Systems architects concentrate on initial system definition and design-making use of the systems engineering specialties to develop satisfactory and feasible system concepts and certification for client use. The architectural approach is needed most as systems become more complex and multi-disciplinary, and for systems customized to individual clients.

This tutorial will cover the concepts of systems architecting; the evidence for a distinct architectural approach; the architect’s organizational and life cycle roles; using integrated modeling and heuristics to form and define architectures; and recent developments in making systems architecture a recognized profession. It will explore issues of current concern, such as the relation between system and software architectures, and the architecting of collaborative systems (systems-of-systems).

LECTURER: Dr. Mark Maier



Dr. Mark W. Maier received the BS and MS degrees from the California Institute of Technology, and PhD degree in Electrical Engineering from the University of Southern California. While at USC, he held a Hughes Aircraft Company Doctoral Fellowship, where he was also employed as a section head.

Currently he is a Distinguished Engineer at The Aerospace Corporation where he founded the systems architecting training program and consults on the application of architecting methods to government and commercial clients. Prior to joining The Aerospace Corporation, he was an Associate Professor of Electrical and Computer Engineering at the University of Alabama at Huntsville. Dr. Maier’s research interests are in systems architecting, engineering computer based systems, satellites, and radar systems. He is co-author, with Dr. Eberhardt Rechtin, of *The Art of Systems Architecting, Second Edition*, published by CRC Press. Dr. Maier is chair of the INCOSE Systems Architecture Working Group.

On-Line Registration for this event
http://www.incose-la.org/SA_flyer.htm

NEW MEMBERS RECOGNITION

The following is a list of new LA INCOSE Members that have joined us since last year.

On behalf of the LA Chapter Officers and Board
Welcome to our Chapter and making us your home!!!

List Compiled by Paul Cudney, Secretary

January 2002

Rachell S. Radpour University of Southern California
Robert P. Reeder Northrop Grumman

February 2002

Larry W Bryant Jet Propulsion Laboratory
Courtney Edwards The Boeing Company
Sandy H. Friedman Functional InfoSystems
Christopher Purcell
Don G. Seale The Boeing Company
Alaka Shivananda The Boeing Company
Christopher S. Taylor The Aerospace Corporation

March 2002

Michael A. Bafico Raytheon Electronics
Kenneth J. Broughton BAE Systems
John D. Caldwell TRW Space & Electronics
Michael D. Garner Raytheon Company
Samuel Gasster The Aerospace Corporation
Gina Kostelecky-Shankle The Aerospace Corporation
Jim R Lundy TRW Space & Electronics
Douglas D. Strother The Boeing Company
Randy A. Woolley Caltrans Division of Innovation and Research

April 2002

Carol C Jacoby Jacoby Consulting
Tami L Power Lockheed Martin Aeronautics

May 2002

Scott G. Barkley University of Maryland College
Kim D. Bell The Aerospace Corporation
Doug E. Bernard Jet Propulsion Laboratory
Paul F. Humel US Air Force
Terry D. Linick Jet Propulsion Laboratory
Kent D. Palmer
William G. Rigert Lockheed-Martin Aeronautical
John F. Salafia Northrop Grumman
Ania Warner The Boeing Company
Marty Y. Zarasua

June 2002

Phil A. Bahorich Parker Aerospace
David W. Bart The Aerospace Corporation
Eufrazio Benavides Lockheed Martin Aeronautics
Tina A. Castillo Alphastar
George Fox Jet Propulsion Laboratory
Anthony Freeman Jet Propulsion Laboratory
Mark A. Gruettner Air Force HQ SMC
Susan Horstkamp United Defense, L.P.
Philip Lopez United Defense, L.P.
Mike Nolte Parker Hannifin
Sherry L. Pietras The Boeing Company/UMR
Jeff S. Plaut Raytheon
Gary A. Rahn Raytheon

INCOSE News

July 2002

Michelle M. Ardeshiri
Jack F. Benzie
Kar ming Cheung
Ivette Falto-Heck
Johanna M. Gunn
David P. Hall
Gregory W. Heinen
Ken A. Hosch
Janet L. Jones
Victor D Mora
Minh-Van T. Oyama
Chandrakant C. Patel
Dale W. Stubblefield
James U'Ren

The Aerospace Corporation
AVTB
Jet Propulsion Lab
United States Air Force
Jet Propulsion Laboratory

SAIC
EDS
The Boeing Company
JPL
USMC-Amphibious Vehicle Test Branch
The Aerospace Corporation
USMC-Amphibious Vehicle Test Branch
NASA/JPL

August 2002

Carlos H. Bernales
John A. Kasper
Adans Ko
Sue Lee
John A. Schnackenberg
Michael Stefanini
Dane Stone
Henry F. Tauchen

The Boeing Company
The Aerospace Corporation
Jet Propulsion Laboratory
Household Technology Services
ARINC
Jet Propulsion Laboratory
Walt Disney Imagineering
Jet Propulsion Laboratory

September 2002

Fred S. Brown
Chris Cardenas
Arif A. Dhanidina
Paula Y. Gray
Ray M Haynes
Jim A. Manson III
Michael R. Mott
Ryan A. Noguchi
Mario C. Vidalon

Loyola Marymount University
Teledyne Brown Engineering
Northrop Grumman
Jet Propulsion Laboratory
TRW
The Boeing Company IDS
The Boeing Company
The Aerospace Corporation
UC Irvine Extension

October 2002

Joe M. Lazaro

Ravi Mathur
Gary K. Noreen
Don T. Potter
John W. Shankle
Michael A. Thorburn
Marilee J. Wheaton

Northrop Grumman Information
Technology
The Boeing Company
Jet Propulsion Laboratory
Jet Propulsion Laboratory
Northrop Grumman
TRW Space & Electronics
The Aerospace Corporation

November 2002

Anne Campbell
Dennis Schwarz
David Yeung

California Institute of Technology IRC
The Boeing Company
Northrop Grumman

December 2002

Arsalan Danish
Anthony Jones
Jeffrey Moritz
Carl Scaglione II
Scott Whitehead

University of Southern California
ProcessWorks

Northrop Grumman Space Technology
The Boeing Company

January 2003

Richard Weiss

The Boeing Company IDS

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Mar'

2003

INCOSE News

Return Address:

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

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Issue

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2003

Mar'

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 L. Dickerson

Vice-President:

John Hsu

Past President:

Michael E. Krueger

Treasurer:

Marsha Weiskopf

Secretary:

Paul Cudney

Membership:

Susan Ruth

Programs/Speakers:

Gina Kostelecky-Shankle

Ways and Means:

Thomas Kudlick

Tutorials/Education:

Saul D. Miller

Communications:

Ronald Williamson

2003 Officers and Board

simimike@iname.com or

john.c.hsu@boeing.com or

michael.krueger@ase-consult.com or

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susan.c.ruth@aero.org or

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membership@incose-la.org

programs@incose-la.org

waysandmeans@incose-la.org

setraining@incose-la.org

communications@incose-la.org

Those interested in INCOSE membership please contact Susan Ruth.

Those interested in working on a committee please contact the appropriate Director.