



# NEWSLETTER

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2002, 2004-07



2003



## UPCOMING EVENTS

### May Speaker Meeting

“Top Technology Challenges in Human Systems Integration”

Speaker: Elaine M. Thorpe

May 12, 2009

The Boeing Company

5301 Bolsa Avenue, Huntington Beach

Reservations Required

see page 2 for more details

### SAVE THE DATE

more details next month

June speaker meeting: Jimmy Hoang-Tri Thai (SAIC) topic and title being selected; June 9.

### NOT A MEMBER? JOIN INCOSE!

Learn more about becoming a member by clicking on: <http://www.incose.org/membership/valueofmembership.aspx>

#### For up-to-the-minute event details:

- ◆ Check future editions of the Newsletter
- ◆ Watch your email for the Reflector
- ◆ Visit the INCOSE-LA website at [www.incose-la.org](http://www.incose-la.org)

## Planning Ahead, Looking for Future Events

Compiled by Jorg Largent, Co-editor

One important activity of the Board of Directors is to organize activities that give the members of the chapter an opportunity to network with other systems engineers and to hone their skills by learning from each other and from leaders in the field. The following is a list of some of the subjects our Board of Directors is pursuing for tutorials and speaker meetings:

1. AADL (Architectural Analysis Description Language)
2. OSATE (Open Source AADL) Tool Environment
3. SysML parametric modeling and execution.
4. Requirements management using Dynamic Object-Oriented Requirements System (DOORS)
5. Simulation-based analysis
6. Object-Oriented Systems Engineering Management
7. DODAF

In addition, the Board of Directors is looking into collaborating with our neighboring chapters and organizing a Region II conference or symposium. Further, we are looking forward to the Conference on Systems Engineering Research (CSER) in 2011.

Right now all these things are notional, but the INCOSE-LA Board of Directors is developing plans and doing the ground work necessary to provide an interesting and informative array of activities for the systems engineering professionals in the Los Angeles metropolitan area.

If you have any suggestions or areas of interest that would be a topic of interest for the community at large, please relay your thoughts to the Director of Programs, John Silvas ([programs@incose-la.org](mailto:programs@incose-la.org)), and to the Director of Tutorials and Education, Shirley Tseng ([setraining@incose-la.org](mailto:setraining@incose-la.org))

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## MINI-CONFERENCE PRESENTATIONS

The presentations from the February Mini-Conference are available on the Chapter website and can be viewed by clicking on:

<http://www.incose-la.org/events/conferences/mini-conference-2009/presentations.html>

## May Speaker Meeting

### "Top Technology Challenges in Human Systems Integration"

Speaker: Elaine M. Thorpe

**ABSTRACT:** This presentation covers the waterfront of technical challenges in the area of Human Systems Integration (HSI) in the aerospace industry. The presentation will explore Operator Interface design from its traditional focus on ergonomics and cockpit "knob & dial design" to the difficult problems that challenge HSI practitioners today. Topics include information and knowledge management, balancing situation awareness with human workload and performance constraints, expanding mission complexity on shrinking crew complements, and software modeling of human behavior.



**BIOGRAPHY:** Elaine Thorpe is a Boeing Technical Fellow in the area of HSI. She leads the HSI Functional Skill Team, which seeks to define common processes, products, tools, and training for HSI engineers across the Boeing Enterprise. Elaine also serves as a technology scout for the Global Technology organization, which reports to the Boeing Chief Technology Officer. Elaine has worked at Boeing for 22 years, providing operator interface support to Integrated Defense Systems, Commercial Airplanes, and Phantom Works programs. She is currently assigned to the C-130 Avionics Modernization Program Advanced Design group. Elaine holds an M.S. degree in Industrial Engineering/Human Factors from the State University of New York at Buffalo, and a B.S. degree in Psychology Sciences from Buffalo State College.

Elaine enjoys playing music and tennis, and developing a pistachio orchard with her family.

### Particulars for May Speaker Meeting

Remote sites will be available

Cost for members and Boeing employees: FREE

Cost for non-members: \$10.00

**WHEN:** Monday, April 13, 5:30 p.m. to 8:00 p.m.

Meeting Schedule:

- 5:30 - 6:20 p.m. Registration, networking
- 6:20 - 6:30 p.m. Welcome and announcements
- 6:30 - 7:45 p.m. Presentation followed by questions and answers

#### WHERE:

**The Boeing Company, 5301 Bolsa Avenue, Huntington Beach** (host site)

#### DIRECTIONS:

**From San Diego Freeway (405) South:** After passing exit to the 605 Freeway stay in the right lane of the 405, which merges into the Garden Grove Freeway (22) East, and make an immediate exit at Bolsa Chica Street. Drive south to Bolsa Avenue, make left turn at Bolsa, pass the Boeing main entrance sign on your left, and then turn left in to Parking Lot C (just before or at Graham Street). Park and walk to the main lobby at the northwest corner of Building 14.

**From San Diego Freeway (405) North:** Take Bolsa Avenue/Golden West exit (Exit 18, next exit after Beach Blvd exit). Continue West on Bolsa, pass Springdale, and make right turn into Parking Lot C at Graham Street or into the lot entrance immediately following Graham. Park and walk to the main lobby at the northwest corner of Building 14.

**Reservations:** RSVP by May 2 online at [www.incosela.org](http://www.incosela.org) or by email to [registration@incose-la.org](mailto:registration@incose-la.org) (please include "INCOSE-LA May Mtg" in subject line). Boeing employees can refer to Boeing Southern California LTS internal website or contact Denise Nelson at [denise.j.nelson@boeing.com](mailto:denise.j.nelson@boeing.com).

#### Remote sites:

---- Antelope Valley/Palmdale held at the Antelope Valley College - no reservation deadline.

---- Boeing Anaheim - RSVP one day prior to meeting. Refer to Boeing Southern California LTS internal website or contact Bob Gorby at [robert.c.gorby@boeing.com](mailto:robert.c.gorby@boeing.com).

---- The Aerospace Corporation, 2350 E. El Segundo Blvd., El Segundo.

**NOTE REGARDING AEROSPACE:** A reservation is required for individuals who would like to attend the speaker meeting at Aerospace. Note: Foreign nationals MUST register by May 5 to allow time for approval process. Attendees must bring picture identification (driver's license, passport, or green card). **Site contact:** Susan Ruth, phone 310-336-6765, or email [susan.c.ruth@aero.org](mailto:susan.c.ruth@aero.org)

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### A Proposed Insight into the Challenge of Bringing Systems Engineering To Established Enterprises

*By Jorg Largent, Co-editor*

A challenge to introducing systems engineering into established enterprises might be imbedded in the uncoded manner in which the enterprises have been doing systems engineering. The development of one system is illustrative. A Virginia-based railroad developed a system using the spiral life cycle model. This development took 35 years and 10 cycles. This particular railroad was a recognized leader in developing the system in question. In and of itself, there is nothing wrong with spiral development. Part of the point of the codified (a.k.a. "classical") systems engineering process is that an enterprise should consider the various models (or views, i.e., spiral, waterfall, incremental, prototype development, etc.) and proactively choose the one that best meets the need of the project.

A conjunctive part of this challenge might well be a culture that is "satisfied" with a 35-year process in the face of changes in the technology and in the needs that make such satisfaction unacceptable.

It should be noted that the citation of one particular history is illustrative of a challenge systems engineering professionals need to appreciate — a challenge that might well be proportional to the superiority of the engineering tradition of the enterprise.

Scratch a requirements engineer and you find a lawyer.

*overheard at the 2009 Mini-conference*

**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](http://www.incose.org)) to update your information.

Name	Title	Company
Karen Woolf	Project Manager	Northrop Grumman
Michael Lamb	Technical Director	USAF/SCNG/TD/Space & Missile Systems Ctr.
Thomas Paige	Project Engineer	The Aerospace Corporation
Steven Benshoof	Vice-President	Legacy Engineering LLC

**The International Council on Systems Engineering (INCOSE)** is a not-for-profit membership organization founded in 1990. Our mission is to advance the state of the art and practice of systems engineering in industry, academia, and government by promoting interdisciplinary, scalable approaches to produce technologically appropriate solutions that meet societal needs.

**The Los Angeles Chapter (INCOSE-LA)** meets several times per year for dinner meetings and speaker meetings affording systems engineering professionals an opportunity to network and to strengthen their skill. In addition, the chapter sponsors tutorials, conferences, and other activities of interest to those in the systems engineering field or related fields. Chapter officers are as follows:

**2009 Board of Directors and Appointed Positions**

**Elected Officers**

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

**Elected-At-Large Directors**

Membership:	Paul Cudney	<a href="mailto:paul.f.cudney@lmco.com">paul.f.cudney@lmco.com</a>	or	<a href="mailto:membership@incose-la.org">membership@incose-la.org</a>
Programs/Speakers:	John Silvas	<a href="mailto:Silvas_john@bah.com">Silvas_john@bah.com</a>	or	<a href="mailto:programs@incose-la.org">programs@incose-la.org</a>
Tutorials/Education:	Shirley Tseng	<a href="mailto:shirleytesng@earthlink.net">shirleytesng@earthlink.net</a>	or	<a href="mailto:setraining@incose-la.org">setraining@incose-la.org</a>
Ways and Means:	Dana Pugh	<a href="mailto:dana.pugh@incose.org">dana.pugh@incose.org</a>	or	<a href="mailto:waysandmeans@incose-la.org">waysandmeans@incose-la.org</a>
Communications:	Eddie Ung	<a href="mailto:edie@raytheon.com">edie@raytheon.com</a>	or	<a href="mailto:communications@incose-la.org">communications@incose-la.org</a>

**Appointed Positions**

Newsletter Co-editors:	Eddie Ung, Jorg Largent	<a href="mailto:maiteez@yahoo.com">maiteez@yahoo.com</a>	or	<a href="mailto:jorg.largent@incose.com">jorg.largent@incose.com</a>
Newsletter Production Manager:	Lee-Ann Seeling	<a href="mailto:LSSeeling@aol.com">LSSeeling@aol.com</a>		
Reflector Manager:	Susan Ruth	<a href="mailto:susan.c.ruth@aero.org">susan.c.ruth@aero.org</a>		
Industrial Relations Manager:	Jose Garcia, Jr.	<a href="mailto:jose.s.garcia-jr@boeing.com">jose.s.garcia-jr@boeing.com</a>		
Technical Society Liaison:	Edmund Conrow	<a href="mailto:ehcrisk@yahoo.com">ehcrisk@yahoo.com</a>		
Chapter Recognition Manager:	Michael Maar	<a href="mailto:michael.c.maar@boeing.com">michael.c.maar@boeing.com</a>		
Lead Site Coordinator:	Anna Warner	<a href="mailto:anna.warner@boeing.com">anna.warner@boeing.com</a>		
Webcast Event Manager:	Chris Delp	<a href="mailto:cdelp@jpl.nasa.gov">cdelp@jpl.nasa.gov</a>		
Website Content Manager:	Lee-Ann Seeling	<a href="mailto:LSSeeling@aol.com">LSSeeling@aol.com</a>		
Website Technical Manager:	Benjamin Luong	<a href="mailto:Benjamin.Q.Luong@boeing.com">Benjamin.Q.Luong@boeing.com</a>		
2009 Mini-conference Chairman:	Shah Selbe	<a href="mailto:shah.selbe@boeing.com">shah.selbe@boeing.com</a>		
2009 Mini-conference Technical Program Chair	Dick Emerson	<a href="mailto:remerson9@gmail.com">remerson9@gmail.com</a>		
Venue Chair	Shah Shelbe	<a href="mailto:shah.selbe@boeing.com">shah.selbe@boeing.com</a>		
Representative to San Fernando Valley Engineers' Council	Stephen Guine	<a href="mailto:Stephen.Guine@ngc.com">Stephen.Guine@ngc.com</a>		

Those interested in INCOSE membership please contact Paul Cudney - [paul.cudney@incose.org](mailto:paul.cudney@incose.org). If you wish to be placed on our email distribution please contact Susan Ruth - [susan.c.ruth@aero.org](mailto:susan.c.ruth@aero.org).

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**Return Address:**

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

Forwarding Address Requested



# **Do you have a message for 400 systems engineering professionals?**

The INCOSE-LA chapter is accepting advertisements from consultants, other professional organizations, organizers of professional conferences, companies seeking to employ systems engineers and academic organizations. Please contact the chapter Communications Director Edie Ung at [ma1teez@yahoo.com](mailto:ma1teez@yahoo.com) or co-editor Jorg Largent at [jorg.largent@incose.com](mailto:jorg.largent@incose.com).

**Your message to systems engineers could be here!**