NEWSLETTER

INCOSE LOS ANGELES CHAPTER

GOLD CIRCLE AWARD
2004-14

PLATINUM CIRCLE AWARD
2015

2008, 2012 President's Award for Most Outstanding Chapter

INCOSE
International Council on Systems Engineering

ELECTION SPECIAL

Meet the Candidates! 2017 Chapter Elections

President: Phyllis Marbach.

Recently retired from Boeing Defense Space and Security, Phyllis has over thirty years of experience in aerospace programs such as satellites, chemical lasers, the International Space Station, and various propulsion systems.

Since retiring, Phyllis has dedicated much of her free time to serving INCOSE-LA. She became active in the LA Chapter in 2012 after presenting a paper on Agile at the one day mini-conference, Phyllis started helping with the speaker meetings at the remote site of Boeing Huntington Beach, later hosting a networking event in Orange County. In 2015 she served as the Membership Director and this year she has served as the Vice-president.

As your president in 2017, Phyllis plans to work closely with the board members to continue providing high quality, member-oriented service to the members of the Chapter through excellent monthly speaker meetings, social and networking events, and workshops. She will support the Conference on Systems Engineering Research organizing committee as needed to help ensure another successful conference.

HOW TO VOTE:
**Go online at www.incose-la.org.
Voting period: November 3-December 2, 2016**

CSER 2017: It's Coming!
March 23 — 25, 2017

The Conference on Systems Engineering Research (CSER) leadership team is working on the preparations for the conference, with paper submittals, and the formation of sub-teams to attend to the many details. One team that needs to come together quickly is the team of paper reviewers. Chairmen and women for the panels are being contacted. INCOSE-LA representatives have been meeting with the Crowne Plaza Redondo Beach and Marina, the venue for CSER 2017. All in all, CSER 2017 is shaping up to be another excellent conference in keeping with past conferences hosted by the University of Southern California (USC) and the Los Angeles Chapter of INCOSE.

CSER 2017 is an excellent opportunity for career enhancement:

- Write a paper; join the discussion of the latest concepts; take the lead (note call for papers deadline is November 1, 2016).
- Facilitate the conference by participating in technical reviews, venue coordination, publicity, et al; the opportunities are innumerable.
- Attend the conference for networking and learning opportunities on the world stage.

CSER 2017 will be more than excellent papers, knowledgeable and erudite speakers, and a top-notch venue. The success of conferences and symposia such as this is tied to the sponsors who support the conference, and Dick Emerson and his team are well on their way to signing up a stellar group of sponsors such as sponsored the CSER 2014 and the 2016 Regional Mini-Conference.

Inside This Edition

The Nomination and Voting Process

The transition from 2016 to 2017 quickly approaches. Your 2016 Board of Directors (BoD) calls on you, the members of the Chapter, to take time to read your slate of candidates for 2017. The officers to be elected this year are: President, Vice-President, Secretary, Director of Programs, Treasurer, Director of Communications, Director of Ways and Means, Director of Membership, and Director of Systems Engineering Education. These candidates are presented to you in the article beginning on page 1.

The success of the Los Angeles Chapter is driven by two things: our officers and our members. INCOSE has acknowledged the Chapter with the Gold Circle Award every year since 2003 and with the President's Award for Most Outstanding Chapter in 2008 and 2012 (chapters are not considered for repetition more frequently). As reported in earlier editions of the *Newsletter*, the Chapter received a "Platinum Award," a higher level of award initiated this year at the International Symposium in Edinburgh, Scotland. However, more important than awards are the services and value provided to and available to the Chapter members.

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 Notices.

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. The committee also considers those who are willing to serve on the Board. As Paul Cudney, a past 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 2017 BoD. We proudly introduce to you our slate of candidates for next year's Board of Directors.

Quarterly Strategic Planning Meetings are how the board identifies new ways to support the Los Angeles Chapter, and Phyllis invites each member to attend these events in the future and to make his or her voice heard as a part of the planning. Communication with the members of the Chapter will continue with the Newsletter and social media.

Phyllis is keeping her hand in the practice of systems engineering. Currently, Phyllis is a Scaled Agile Framework™ Version 4.0 Program Consultant. The past eight years she was an agile coach for the Boeing Enterprise for unmanned air systems, radio, avionics and research programs. Phyllis was a Boeing Designated Expert in agile software development, software engineering and systems engineering. She is also a Certified ScrumMaster and a Certified Scrum Product Owner. Phyllis is a principal with Ciel Solutions, www.ciel.solutions.

Phyllis' education includes master's in engineering from the University of California, Los Angeles, and a Bachelor of Science Chemistry and Applied Mathematics from Centre College of Kentucky.

Vice-president: Dr. Rick Heffner, Ph.D.

Dr. Hefner specializes in software-intensive systems development; project management; Six Sigma; process improvement, assessment, and training; Capability Maturity Model, Capability Maturity Model Integration (CMMI), ISO 9000 standards; technology transfer; and risk management. His experience spans over 30 years.

Dr. Hefner currently serves as Program Director for the Caltech Center of Technology Management Education. The Center mission is the development and delivery of executive and skills-based training to working professionals in the high-tech industries. Previously, Dr. Hefner served as Director of Process Assurance for Northrop Grumman Corporation, where he was responsible for program management and engineering processes, training, Lean Six Sigma, and CMMI.

Dr. Hefner is credited with over 80 publications and presentations. He earned his doctorate from the University of California, Los Angeles, in applied dynamic systems control. He received his master's and bachelor's degrees from Purdue University in interdisciplinary engineering.

Secretary: Jeffrey Willis

Jeffrey Willis has been employed as an electronics engineer specializing in aircraft avionics for the Northrop Grumman Corporation in Palmdale since 2007. Prior to that, he worked as a principal engineer specializing in GPS aircraft integration for ARINC Engineering Services in El Segundo, bringing his total time in the aerospace industry to 12 years. Running in parallel with that time has been Jeffrey's service in the defense industry, serving as an air operations center officer in the US Air Force Reserves (USAFR) at March Air Reserve Base for the past thirteen years.

His service in the USAFR has taken him to South Korea, Japan, Germany, and the United States, where he has worked in both the planning and operations sections. Jeffrey currently holds the rank of lieutenant colonel.

Before embarking on his careers in the aerospace industry and USAFR, Jeffrey served thirteen years on in the USAF as a B-52 and an E-3 navigator. He was based in northern California, Washington, Oklahoma, and Okinawa, Japan. During that time, Jeffrey accrued over 3,300 flying hours, and flew over 50 combat support missions to enforce the no-fly zones over northern and southern Iraq.

Jeffrey completed the Caltech certificate courses in Systems Engineering and Project Management. He holds a Bachelor of Electrical Engineering from the University of Southern California and an Master of Business Administration with a marketing emphasis from Oklahoma City University. Jeffrey is currently working on an Master of Science in Systems Architecting and Engineering.

Director of Programs (two-year term): Michael Do

Dr. Michael D. Do, a major in the U.S. Army, is an engineering officer who most recently served as the operations officer for both the 20th Engineer Battalion and the 36th Engineer Brigade at Ft. Hood, Texas. Previously, he served in a joint assignment as an Afghanistan-Pakistan Hands (AFPAK) officer assigned to U.S. Army Corps of Engineers headquarters in Washington, D.C. As an AFPAK officer, Michael deployed and was assigned to a NATO Special Operations Component Command as a military adviser to the district governor and ministerial officials in southern Afghanistan, advising them on governance and engineer development issues. In 2015, Michael was selected into the first cohort (2015-2017) of the INCOSE Institute for Technical Leadership Program. This two-year program seeks to accelerate the development of systems engineering leaders who will exemplify the best of the organization and the systems engineering profession. Michael's education includes a Ph.D. in mining and systems engineering, a master's of science in systems engineering, an M.Eng. in engineering management, and B.S. in systems engineering; all from the University of Arizona.

Treasurer: Dr. Lin Yi

Dr. Lin Yi is a member of the technical staff in Frequency and Timing Advanced Instrumentation Development Group of the Jet Propulsion Laboratory (JPL) in association with the California Institute of Technology (Caltech). He is a subsystem engineer, technical lead and physicist in JPL's Frequency Standards Test Laboratory, supporting multiple NASA internal and external missions. His expertise lies in areas of atomic clocks and global navigation satellite systems, ultrafast and deep ultraviolet laser engineering, precision instrumentation and measurement, software engineering, frequency and timing metrology, atomic, molecular, optical and plasma physics.

You are invited to the INCOSE-LA Chapter Holiday Party!

Friday evening, 5:00 p.m. December 11, 2016

Location same as last year at the elegant Del Rey Yacht Club, 13900 Palawan Way Marina Del Rey

Free for members — a nominal charge for guests and non-members

Great people ❄ Fine food ❄ Lots of Fun White Elephant Gift Exchange

An INCOSE-LA Tradition!

RSVP Required; go to the INCOSE-LA website http://www.incose-la.org/ to RSVP and for more details

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The team has met with representatives of the Crowne Plaza Redondo Beach and Marina, the venue for CSER 2017.

The Crowne Plaza was chosen as the venue, in part, because of the satisfaction with its being the venue for CSER 2014. Work has been completed on the following arrangements:

- Audio/visual
- Menu selections for Thursday, Friday, and Saturday
- Facilities layout for keynote presentations, tutorials, paper sessions, banquet, support functions, registration, and sponsors and exhibitors
- Ancillary activities such as parking, rooms, and socials

CSER 2017 offers researchers in academia, industry, and government a common forum to present, discuss, and influence systems engineering research. It provides access to forward-looking research from across the globe, by renowned academicians as well as perspectives from senior industry and government representatives. Co-founded by the University of Southern California and the Stevens Institute of Technology in 2003, CSER has become the preeminent event for researchers in systems engineering across the globe.

The theme for CSER 2017 is, "Disciplinary Convergence: Implications for Systems Engineering Research," and serves as a spring board for papers and discussions across the spectrum of challenges facing the discipline in both the world of academia and the world of the practitioner.

With this theme as a backdrop, papers have been accepted on the following topics:
Formal Methods in Systems Engineering
Resilience and Affordability
Model-Based Systems Engineering
Systems and SoS Integration
System Architecture and Complexity
Trade-space Visualization and Analysis
Cognitive Systems Engineering
Cyber secure resilient systems
Lean and Agile Systems Engineering
Cyber-Physical Systems and Internet of Things
Systems Thinking and Complexity Management
Infusion of System Science into Systems Engineering
Uncertainty Quantification
Smart Manufacturing
Advancing Systems Engineering Education
Systems Engineering and Decision Science.

In addition to this wide selection of topics looking to the future of systems engineering, CSER 2017 features a full slate of luminaries from academia, government, and industry as keynote speakers and panelist.

CSER 2017 is looking forward to a stellar cadre of keynote speakers.

Dr. Yannis C. Yortsos has served as Dean of the USC Viterbi School of Engineering since June 2005. He is the Chester F. Dolley Professor of Chemical and Petroleum Engineering, and holds the Zohrab A. Kaprielian Dean's Chair in Engineering. Dr. Yortsos is well known for his work on fluid flow, transport and reaction processes in porous and fractured media with applications to the recovery of subsurface fluids and soil remediation. He has been actively involved in the peer review of the Yucca Mountain Project for the disposal of high-level radioactive waste.

The Crowne Plaza Redondo Beach and Marina, venue for CSER 2017

CSER 2017
conference on systems engineering research

15th *Annual* **Conference on Systems Engineering Research (CSER)**

March 23 - 25, 2017, Crowne Plaza Hotel, Redondo Beach, CA

Disciplinary Convergence: Implications for Systems Engineering Research

Conference General Co-Chairs, USC

Prof. Azad M. Madni
Systems Architecting and Engineering

Prof. Barry Boehm
Systems and Software Engineering

Technical Program Co-Chairs, USC

Prof. Roger Ghanem
Mechanical Engineering

Prof. Daniel Erwin
Astronautical Engineering

Research Paper Topics

- *Formal Methods in Systems Engineering*
- *Resilience and Affordability*
- *Model Based Systems Engineering*
- *Systems and SoS Integration*
- *System Architecture and Complexity*
- *Trade-space Visualization and Analysis*
- *Cognitive Systems Engineering*
- *Cyber Secure Resilient Systems*
- *Lean and Agile Systems Engineering*
- *Cyber-Physical Systems and Internet of Things*
- *Systems Thinking and Complexity Management*
- *Infusion of System Science in SE*
- *Uncertainty Quantification*
- *Smart Manufacturing*
- *Advancing Systems Engineering Education*
- *Systems Engineering and Decision Science*
- *Wireless Health*

Conference on Systems Engineering Research (CSER) offers researchers in academia, industry, and government a common forum to present, discuss, and influence systems engineering research. It provides access to forward-looking research from across the globe, by renowned academicians as well as perspectives from senior industry and government representatives. Co-founded by University of Southern California and Stevens Institute of Technology in 2003, CSER has become the preeminent event for researchers in systems engineering across the globe

Important Dates

- **November, 2016:** REGISTRATION OPEN
- *December 15, 2016: Notification to authors*
- *February 1, 2017: Final Conference Papers due*

Application Areas

- *Autonomous Vehicle Networks*
- *Defense Systems and System-of-Systems*
- *Space and Aerospace Systems*
- *Financial Systems*
- *Global Supply Chains*
- *Healthcare Delivery*
- *Homeland Security*
- *Smart Manufacturing*
- *Medical Devices*
- *Sustainable Energy*
- *Transportation Systems*
- *Urban Systems and Infrastructure*

Conference Website
http://viterbi.usc.edu/sae/cser2017.htm

Conference Co-Managers

Mr. Terry Rector
The Aerospace Corp.

Ms. Marilee Wheaton
The Aerospace Corp.

Venue

- **Crowne Plaza Hotel**
  300 N Harbor Dr, Redondo Beach, CA 90277

USC Viterbi
School of Engineering
Systems Architecting and Engineering

INCOSE
LOS ANGELES

STEVENS
INSTITUTE *of* TECHNOLOGY
THE INNOVATION UNIVERSITY

For Sponsorship/Exhibitor information contact Richard Emerson, remerson9@gmail.com

Dr. Greg Hyslop is the Chief Technology Officer of The Boeing Company and Senior Vice-president of Boeing Engineering, Test & Technology. Dr. Hyslop oversees the development and implementation of the enterprise technology

investment strategy, and his portfolio of responsibilities includes the companywide Boeing Engineering function; Boeing Research & Technology, the company's advanced central research and development organization; and Boeing Test & Evaluation, the team that verifies and validates Boeing's commercial and defense products.

Ms. Kristen J. Baldwin is the Principal Deputy to the Deputy Assistant Secretary of Defense for Systems Engineering (DASD(SE)). Ms. Baldwin acts on behalf of the DASD and is responsible for engineering and technical workforce, policy, and systems engineering planning for major defense acquisition programs. Her oversight includes concept engineering and analysis, design, development and manufacturing, and independent program review and assessment. She supports the DASD role of functional leader for more than 40,000 defense acquisition professionals in the Department of Defense (DoD) Engineering and Production, Quality, and Manufacturing workforce.

Dr. Paul D. Nielsen is Director and Chief Executive Officer of the Software Engineering Institute (SEI), a global leader in advancing software and cybersecurity to solve the nation's toughest problems through focused research, development, and transition to the broad software engineering community.

The SEI is a key innovator in areas central to the U.S. Department of Defense and civilian government operation in the cyberspace domain, including software architecture, software product lines, interoperability, the integration of software-intensive systems, network and system resilience, and the increasing overlap of software and systems engineering.

Integrated with the USC team of faculty, staff, and students is the Los Angeles Chapter of INCOSE. Continuing a long-standing role of facilitation with USC and fresh off the highly successful Regional Mini-Conference, INCOSE-LA is working on coordinating the venue, support logistics, sponsors, and exhibitors.

The team has started contacting potential sponsors and exhibitors, and our overtures are being well received. Attendees can expect another superb selection of industry and academic leaders as sponsors and exhibitors.

For sponsorship and exhibitor information contact Dick Emerson at remerson9@gmail.com

Dr. Yi has published more than 30 peer reviewed journal articles and conference papers. Dr. Yi held and holds memberships in a wide range of professional organizations. Dr. Yi earned his bachelor's degree in electronics engineering and his doctorate in radio physics, the latter with honors, and both from Peking University in the People's Republic of China.

From 2009 to 2011 he was a postdoctoral fellow at the Paris Observatory in France. In 2011, he was a visiting scientist at Physikalisch Technische Bundesanstalt in Germany. From 2011 to 2013, he was a NASA Postdoctoral Fellow at JPL. Since 2013 Dr. Yi has been a member of the permanent staff at JPL and Caltech.

Director of Communications: Neil Wigner

Neil has been a volunteer and currently is the Website Manager.

Director of Ways and Means: Stephen Guine

Stephen is a Systems Engineering Manager with Northrop Grumman. In this role he manages the Requirements Development, Management and Verification Team in the execution of traditional and model-driven systems engineering.

Stephen's experience includes the development of systems engineering processes and tools, providing systems engineering training to the enterprise, and conducting quantitative analysis in support of technical and design decisions and system performance.

Stephen's contributions to the Los Angeles Chapter span several years, having served as Vice-president, President, Director of Communications, and Ambassador to the San Fernando Valley Engineering Council. Stephen has expressed and demonstrated a strong belief in systems engineering and in INCOSE. He had found that in an increasingly interconnected and complex world, the discipline, science, and execution of systems engineering would be a key determinant in the ongoing and emerging quality of life in our communities and our abilities to pursue our professional and personal passions.

The neighborhood around the Crowne Plaza

Director of Membership: Mark TenEyck

Mark TenEyck is an accomplished business executive with 30 years of experience in management, design, fabrication and building. He started his first business at the age of 19 in residential home building and design. He transitioned to an 18-year tenure with Dassault Systemes, working in management selling innovative engineering solutions. He also designs and builds custom modern warm furniture sold in high-end retail stores, is on the Advisory Board at Cerritos College, and teaches computer-aided design at Roosevelt High School.
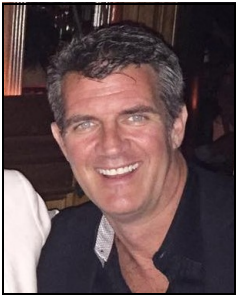
Mark is distinguished by his passion for business, his focus on collaborative team building and his commitment to delivering results. His contagious enthusiasm instills him and his team members with extraordinary energy and dedication in an environment where creativity and innovation are encouraged. A dynamic public speaker, teacher and mentor, Mark is a sought-after presenter at meetings, team building events and conferences. He transmits key concepts in business innovation supported by smart adoption of technology to enable business to continually improve their products and processes while reducing their overall costs. Mark is passionate about his work and enjoys encouraging others to experience the dynamic of design and fabrication. He donates his time teaching in Boyle Heights and mentoring First Robotics Teams.

Director of Systems Engineering Education: Tony Magorno

Tony Magorno is currently a lead cybersecurity engineer working for the MITRE Corporation. Tony has over 24 years of experience with Department of Defense space systems (offensive, defensive, and tracking systems), intelligence, infrared systems, optical systems (telescopes and lasers), cybersecurity, cryptographic management and design, and command, control, communications and computers intelligence surveillance and reconnaissance systems. He started his career as an Air Force enlisted member tracking missiles and satellites, performing intelligence analysis, leading command and control crews, developing and designing command and control systems, training crew members, performing operations evaluations, and managing a large systems engineering and architecting team for space superiority.

While on active duty, Tony earned a degree in Space Systems Operations through the Community College of the Air Force and graduated Cum Laude from Southern Illinois University with a Bachelor of Science in Industrial Technology. This spurred his interest in systems engineering.

After serving in the Air Force, Tony started working for ARINC Engineering Services as the lead systems security engineer for the Air Force Satellite Control Network. He developed vulnerability analyses of the network based completely on open source information, which resulted in better review of the systems security posture. He also worked as the Information Assurance Manager, ensuring components maintained security approval from the accrediting authority. He moved on to Global Positioning Satellites and worked in support of the Mission Planning System (SMPS). He installed the prototype and support testing to ensure SMPS was mission ready. He also developed the security guidance for the SMPS and implemented the guidance to ensure accreditation and operational use.

Tony then moved to MITRE as a Lead INFOSEC/ Cybersecurity Engineer. During his time at MITRE he has support a wide range of specialized programs. His work includes researching cryptographic module development, key management, security architecture, security maintenance and logistics support, and Model-Based System Engineering. During his time at MITRE he has earned a Graduate Certificate and Masters in Systems Architecting and Engineering from the University of Southern California. He hopes to eventually move on to a Ph.D. in the field of systems engineering.

2016 Board of Directors

Elected Officers			Elected At-large Directors		
President	Terry Rector	Terry.E.Rector@aero.org	Membership	Mark TenEyck	mteneyck11@gmail.com
Vice-president	Phyllis Marbach	prmarbach@gmail.com	Programs	Dr. Rick Hefner	rhefner@caltech.edu
Immediate Past President	Stephen Guine	Stephen.Guine@ngc.com	Systems Engineering Education	Tony Magorno	amagorno@mitre.org
Secretary	Jeffrey Willis	Jeffrey.Willis@ngc.com	Ways and Means	Paul Cudney	paulcudney@dslextreme.com
Treasurer	Harvey Soldan	harvey.soldan@jpl.nasa.gov	Communications	Lin Yi	Lin.yi.dr@ieee.org
Appointed Positions					
Newsletter Editor	Jorg Largent	jorg.largent@incose.org	Student Division Ambassadors	Scott Birtalan	scott.birtalan@ngc.com
Technical Society Liaison	Shirley Tseng	shirleytseng@earthlink.net	Reflector Manager	Deborah Cannon	deborah.a.cannon@aero.org
Chapter Awards Manager	Phyllis Marbach	prmarbach@gmail.com	Industrial Relations Manager	Open	
Professional Networking Chair	Scott Birtalan	scott.birtalan@ngc.com	New Member Ambassador	Collette Kurtz	kurtz905@aol.com
Representative to the SF Valley Engineer's Council	Stephen Guine	Stephen.Guine@ngc.com	Volunteer Coordinator	Karen Miller	karmill888@aol.com

Return Address:

PO Box 10969
Westminster, CA 92685-0969

Forwarding Service Requested

👉 ELECTION SPECIAL 👈

UPCOMING EVENTS

For more details on Chapter-sponsored events and registration, go to incose.org/los-angeles

Chapter Holiday Party!
Date: December 11, 2016 - 6:00 p.m. - 9:00 p.m.
Venue: Marina del Rey Yacht Club
Location: 13900 Palawan Way
Details in work; watch for a Reflector Notice in your e-mail and an article in a future edition of the Newsletter

Town Hall Meeting
Date: January 11, 2017 - 6:00 p.m. - 9:00 p.m.
Venue: The Aerospace Corporation
Location: El Segundo
Details in work; watch for a Reflector Notice in your e-mail and an article in a future edition of the Newsletter

International Workshop
Date: January 28 — 31, 2017
Venue: Torrance Marriott Hotel
Location: Torrance
Check the INCOSE website (http://www.incose.org/newsevents/EventIW) for details

Chapter Soiree
Date: an evening during the International Workshop
January 28 — 31, 2017
Venue: Torrance Marriott Hotel
Location: Torrance
Details in work; watch for a Reflector Notice in your e-mail and an article in a future edition of the Newsletter

Conference on Systems Engineering Research (CSER 2017)
Date: March 23 — 25, 2017
Location: The Crowne Plaza Hotel om Redondo Beach
See article on page 1 for more details

For more information on these and other events of interest in the Los Angeles area, look for a Reflector Notice in your email, and check the Chapter website: incose-la.org
Also like us on facebook!