

# NEWSLETTER



2008, 2012, 2017  
President's Award  
for Most  
Outstanding Chapter



2004-14



2015-18

## Systems Engineering and the INCOSE Advantage

Companies are hiring systems engineers. Chapter President Mark McKelvin discussed the growing number of job opportunities for systems engineers in the Los Angeles area, a reflection of the growing appreciation of the profession throughout the country. It isn't just the aerospace industry. For more information both the Chapter and INCOSE have information on opportunities on their websites:

Mark also discussed the advantages of INCOSE membership and the services provided by the organization. Employers are increasingly appreciative of certification by INCOSE as an assurance of an individual's knowledge and expertise as a systems engineer. INCOSE offers a wide range of reference sources and training opportunities for systems engineers, ranging from the System Engineering Body of Knowledge (SEBoK) to webinars and tutorials.

The Chapter also offers educational opportunities for systems engineers, including speaker meetings on timely topics, training, tutorials, networking and volunteering, and articles in the *Newsletter*. The Chapter website is a fountain of information in its own right. Members are encouraged to take advantage of these opportunities and to suggest other value-added activities. Send your suggestions to [president@incose-la.org](mailto:president@incose-la.org).

The INCOSE job board is on the web at: <https://incose.careerwebsite.com/>

The SEBoK website address is:

<https://www.sebokwiki.org/wiki/>

[Guide to the Systems Engineering Body of Knowledge \(SEBoK\)](#)

## CSER 2020: Being Rescheduled WSRC Still on Schedule

The leadership team of the Conference on Systems Engineering Research (CSER) has been continuously monitoring the situation concerning the coronavirus and has been planning for contingencies. Given the escalation in the number of cases and the travel restrictions from government, industry, and academic institutions, we have had many attendees cancel, making postponement the only viable action. We feel postponing the conference instead of cancelling was a better option due to the strong attendance numbers prior to the health concerns.

CSER is a vibrant international community of government, industry, and academic researchers and research sponsors, and we treasure the collaboration within this community while being mindful of the health and well-being of all CSER attendees. Rest assured that after CSER2020 is rescheduled, all accepted presenters, tutorials, workshops, and keynotes will be reprogrammed.

Stay tuned for the announcement of new dates, and many thanks for your commitment to make CSER2020 another great success.

We would also like to take this opportunity to thank the strong support of our sponsors which help make all of this possible.

Similarly, the leadership team of the Western States Regional Conference is being very alert to and sensitive to the situation concerning the coronavirus and is planning for contingencies. If there are any changes to the plan for this conference, the leadership team will communicate the message as soon as practical.

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#### Upcoming Events

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## A Systems Engineering Approach February Speaker Meeting

Dr. J Shelley spoke to the challenge of reaching potential engineers and leading them through academia to careers in engineering. Her presentation was entitled, “Antelope Valley Engineering Programs: A Systems Engineering Approach.” Dr. Shelley chose one facet of this complex challenge, and that challenge was a potential flow through the Antelope Valley. The Antelope Valley is an area north of Los Angeles and includes Edwards Air Force Base, Palmdale and Lancaster, an area roughly bounded by the San Gabriel Mountains, the Tehachapi Mountains and the low desert to the east. Dr. Shelley used the term to define a larger area based on aerospace employment, including a range of engineering activities at Fort Erwin, Goldstone, China Lake, and Mojave. Employers of engineers include NASA, the military, and the many contractors who support them, plus independent civilian activities such as Virgin Galactic, builder of the SpaceShipTwo.



Dr. Shelley

In the same area is a large number of high schools. The challenge: creating a geographically convenient facility in which students could become educated as engineers of sufficient quality to meet the need for engineers in the area. This is the point at which Dr. Shelley and the University of California Long Beach (CSULB) come into play. The Antelope Valley Engineering Programs (AVEP) constitute a unique program, independently accredited by the Accreditation Board for Engineering and Technology (ABET), featuring a degree completion program created to serve the under-served high desert region and its aerospace industry.

Dr. Shelley has been teaching upper-division undergraduate and graduate level courses in mechanical engineering since 2005. She has conducted educational research in engineering leadership and served as the ABET evaluation coordinator for the CSULB's Antelope Valley Engineering Program.

Key to the success of the program is the partnership of the Air Force Rocket Laboratory (AFRL), the City of Lancaster, and CSULB. The City of Lancaster provides the physical plant, and the AFRL has a reservoir of PhDs to teach.

The program is currently architected to teach five semesters of upper division engineering, with groups of twenty-five students working together to progress through the program. The program includes both classroom teaching and laboratory learning.

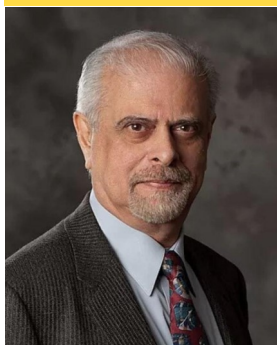
Dr. Shelley requested feedback from INCOSE members on the development of the AVEP and asked for help from INCOSE in selling and facilitating the program.

Part of Dr. Shelley's efforts have been to use systems engineering principles to analyze the functional requirements of the program – identifying needs for resources such as libraries and laboratories.

A collateral challenge is high school preparedness. This challenge confronts all engineering professions. According to a 2015 report in U.S. News and World Report, only about a third of U.S. high school seniors are prepared for college-level coursework in math and reading. The numbers for the pool of high school graduates in the Antelope Valley: 18% were ready to go to college in 2005 and 23% in 2015. One strength for the Antelope Valley is the high level of employment in the aerospace industry and the consequential technology-oriented culture. The Antelope Valley needs a geographically convenient educational facility at which students can become engineers. Which circles back to Dr. Shelley and the AVEP. In a related discussion at the first quarter Strategic Planning Meeting of the Board of Directors of the Chapter, it was noted that engineering is one of the most challenging and difficult majors, but one of the most rewarding in its universal applicability.

The meeting concluded with questions and answers from the audiences, and the appreciation of all in attendance for Dr. Shelley's excellent presentation and her efforts to advance engineering education.

## Dr. Azad Madni, Systems Engineering Pioneer



Dr. Madni

INCOSE Los Angeles member Dr. Azad M. Madni has recently been selected to receive the 2019 IEEE Aerospace and Electronic Systems Pioneer Award. This award is given annually for contributions significant to bringing into being systems that are still in existence today. Congratulations!

The Pioneer Award has been given annually since 1949 to an individual or team for “contributions significant to bringing into being systems that are still in existence today.” These systems fall within the specific areas of interest to the society, that is, electronic or aerospace systems. The contributions for which the award is bestowed are to have been made at least twenty (20) years prior to the year of the award, to ensure proper historical perspective.

Dr. Madni is a Life Fellow of IEEE and founding chair of IEEE SMC Technical Committee for Model Based Systems Engineering. His accomplishments and contributions to the systems engineering profession are legion, in both academia and industry, as witnessed by his imprimatur on the higher level education of many of our members, up to his leadership of the Conference on Systems Engineering Research itself.

## Agile: a Potential Systems Engineering Tool

By Jorg Largent

The Chapter was treated to a delightful and highly entertaining Speaker Meeting on March 10, 2020. The presenter, Cindy VanEpps, presented a charming autobiographical account of her journey with Agile in a well polished presentation. Described as a SAFE™ Program Consultant Trainer, her pragmatic approach and entertaining style make her a “fan favorite,” her presentation reflected a well honed script that was well received by many in attendance.



Cindy VanEpps

Cindy set the challenge she faces against the background of highly regulated environments, citing the iron bar of the Defense Acquisition University (DAU) D5000.1 (PDR, CDR, CDR-1, CDR-2, FRR, Milestones, et al) and the waterfall life cycle model. She catalogued many of the common failings that have occurred in projects ostensibly following the directive: projects which followed processes, checked the boxes, attended meetings, and delivered products, but did not really deliver the goods. She also noted organizational silos which deterred communications. To their credit DAU set out to eliminate these bugaboos, as many remember letter combinations such as CMM, CMMi, and DoDAF – a short list. The systems engineering professional would note that these nobly intended tools and checklists are not systems engineering if project execution degenerates into checking boxes and delivering products with the correct title on the first page. Cindy's presentation included a compelling reinforcement of this phenomenon as part of the challenge she chose to resolve with Agile. As an aside, she stated that the Pentagon has directed Agile for software development.

In the implementation of Agile, Cindy initiated significant social change, what with Agile having a novel lexicon (borrowed in part from rugby). Once trained, the members of an organization were enthusiastic about Agile. She described tools such as “user stories” (use cases) and involving everyone, including customer representatives, in the creation of the tools. Cindy emphasized the value of continuous customer involvement and demonstrations in that they helped maintain a mutual understanding of requirements and expectations. As noted in her biography, Agile can help with “...importance of focus on principles and evolving the specific practices based on both relentless improvement and application of the principles in the way that provides most economic benefit.” As presented, Agile is a powerful tool to help facilitate requirements decomposition, CMMi Key Process Areas of Requirements Management and Requirements Development, and to guard against requirements creep while taking advantage of the iterative nature of systems engineering in a spiral life cycle model; benefits which are accentuated by the Hawthorne Effect and its novelty. People interested in learning more about training can contact Cindy at:

<https://321gang.com/services/safe-rte-certification/>

## April 14, 2020 Speaker Meeting: Case Studies in S-O-S to ROI Transformation: The Top Five Mistakes Leaders Make When Battling the Complexity Monster

### Abstract:

The Challenge: “...Modern business and life is complex, and quickly becoming increasingly more so. The financial system is increasingly connected, the geopolitical environment is becoming more tightly coupled, and regulation is an ever-expanding moving target. Moreover, trends in customization, specialization, and personalization are fueling exponential increases in the variety of choices available for purchase (as well as where and how), forcing leaders to scramble. As a result, public and private institutions are facing an increasingly powerful and growing Complexity Monster that threatens to disrupt the business of getting work done, staying competitive, and thriving. More and more of our organizational systems have gone beyond being just complicated; they have become truly complex.”

From *SOS to ROI – a Strategic Approach to Conquer the Complexity Monster and Accelerate Results*, (2017).

A solution: In this session, Larry Haas, will walk the audience through three case studies both inside and outside A&D, and lead a discussion on the top five mistakes leaders make when attempting to transform from “distress to success” while battling the so-called “Complexity Monster.”

Not only will attendees get a clear definition and picture of complexity, they will also walk away with practical approaches, and applications to help both clients and their own organizations battle complexity both in day-to-day operations, and when managing strategic change.

### Biography:



Larry Haas

Larry Haas is the founder and CEO of Global Aperture LLC, a management consulting firm specializing in helping organizations improve and transform to achieve their strategic goals. The transformation approach he has developed is featured in his book, *SOS to ROI – A Strategic Approach to Conquer the Complexity Monster and Accelerate Results*.

As a consultant and speaker, Larry's work has spanned a cross section of functional areas in industries such as aerospace and defense, agriculture, services, corrections, food and beverage, Homeland Security, and non-profit.

Clients and colleagues often refer to Larry's “sixth sense” ability to see into situations to clarify the complicated and conquer the complex. This skill has provided consistently more boldness for leaders, clearly-defined action for teams, and operational and financial impact for organizations.

Prior to founding Global Aperture, Larry served as a consultant and leader in organizations such as Procter and Gamble, Deloitte, Diamond Consultants (now part of Price Waterhouse Coopers), The Boeing Company, and as an officer and program manager in the United States Air Force.

Larry received his BS in Aerospace Engineering from the University of Arizona, and his MBA with emphasis in finance and strategy from the UCLA Anderson School.

## First Quarter Strategic Planning Meeting

By Jorg Largent

The Board of Directors of the Los Angeles Chapter conducted the first Strategic Planning Meeting of the year on February 22, 2020. The board conducts these meetings quarterly. Eight (of nine) members of the board attended: Mark McKelvin, President/Immediate Past President, Mark Teneyck, Vice-President, Rick Hefner, Treasurer, Phyllis Marbach, Secretary, Karen Grothe, Membership Chair, Nazanin Sharifi, Programs Committee Chair, Dorothy Benveniste, Systems Engineering Education Chair, and Shirley Tseng, Ways and Means Chair. There were three additional people in attendance: Paul Cudney, Registrar, Jorg Largent, Editor, and Eric Belle, who represented the Conference on Systems Engineering Research (CSER). Terry Rector called in to participate in the CSER discussions.

The first part of the meeting was dedicated to the annual training requirements. Mark McKelvin conducted the training, using source material from INCOSE and from the Americas Sector of INCOSE. The training included discussions of the Mission Statement and Vision Statement of INCOSE, as well as the value streams. Mark went over the Systems Engineering Professional testing information and the Strategic Objectives of INCOSE. As a complement to the discussion, the board discussed the Corporate Advisory Board (CAB) of INCOSE, with the thought that it would be good to learn what our local CAB companies systems engineering challenges are and what the Chapter can do to help them.

CSER was another major topic of discussion, as the board reviewed the preparations for the conference. The INCOSE-LA part of the team is working hard to pull together the last-minute details needed to make this yet another great CSER.

Speaker Meetings were discussed. Nazanin Sharifi Programs Committee Chair, has arranged for speaker meetings through April and is working to find more speakers for the remainder of the year. She asked for recommendations for speakers. One concept considered was to have representatives from some of the INCOSE Working Groups speak to the Chapter. Chapter members who would like to address a particular systems engineering topic at a speaker meeting or who are members of a Working Group and can inform the membership about the activities of the Working Group are asked to contact Nazanin at [programs@incose-la.org](mailto:programs@incose-la.org).

Workshops and tutorials were discussed as well. Dorothy Benveniste, Systems Engineering Education Chair, confirmed that a Digital Engineering Overview is scheduled for March 28, 2020. An Agile Workshop by Phyllis Marbach is being considered for the second quarter. An event for the third quarter could be a Model-Based Systems Engineering day. The fourth quarter event could be another training day that ends with a dinner to recognize the Systems Engineering Professionals in the Southern California region – possibly including the San Diego Chapter. Dorothy wants a training event that features a high profile instructor, such as Dean Leffingwell. Dean is recognized as one of the world's foremost authorities on Lean-Agile best practices.

Paul Cudney asked if we could have a session about applying model-based systems engineering that is a two hour workshop conducted by Al Hoheb from Aerospace. For more information or to comment, please contact Dorothy at [djbenven@ca.rr.com](mailto:djbenven@ca.rr.com).

Membership Chair Karen Grothe presented the current membership status. The Chapter has 406 members, which is about the same number as last year. Karen is investigating a concept of increasing recognition of individual members of the Chapter. If you have any suggestions for Karen, please contact her at [membership@incose-la.org](mailto:membership@incose-la.org).

Treasurer Rick Hefner in addition to his duties as Treasurer, is championing the concept of an ambassador program. Rick wants a contact in every organization to start doing this at companies to re-energize the ambassador program. A complementing concept is for the Chapter to support "lunch-and-learn" sessions in the workplace. Those interested should contact Rick at [rhefner@caltech.edu](mailto:rhefner@caltech.edu).

The board concluded the meeting at 3:00 p.m. The enthusiasm had not run out, but time had.

## Stay on Schedule!

## Follow Procedures

By Jorg Largent

The tension between the demands to meet schedule and the processes which must be followed is not new. The following are attributed to a road (railroad) foreman of engines in the 1930s and 40s.

### Stay on Schedule!

With the exacting service that must be given in our *[Twentieth] Century* service to meet the schedule, all possible terminal delay must be eliminated.

A check is being made at all intermediate terminals by all Departments and records are made of the time consumed in their parts of duty.

As you know, but 3 minutes regular terminal stop at Elkhart [Indiana] is allowed by schedule, and your putting your train into Elkhart a little early when possible has helped in putting the train out on time. But when the train arrives on the last second or is late on the schedule, it is expected that we do our part and be ready to depart in three minutes or less.

With your cooperation I feel that we can lead the parade in the prompt handling of the *Century* at intermediate terminals.

### But Follow Procedures....

- #1. We are still finding some water scoops bent wherein they showed striking the approach or ending safety rails at track pans. In such cases, if the water scoop had been dropped and raised at the marker lights this would not have happened.  
Kindly see to it that water scoops are dropped and raised at the marker lights.
- #2 We are experiencing considerable difficulty with the tightlock couplers on our streamlined locomotives, which difficulty is brought about by some of our engineers oiling these couplers.  
The use of oil on the couplers is forbidden.  
Kindly be governed accordingly.

# 18<sup>th</sup> Annual Conference on Systems Engineering Research (CSER)

Crowne Plaza Hotel, Redondo Beach, CA

## Recent Trends and Advances in Model-based Systems Engineering

### 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. Mahta Moghaddam**  
Electrical  
Engineering



**Prof. Daniel Erwin**  
Astronautical  
Engineering



**Ms. Marilee Wheaton**  
The Aerospace Corp.

Systems engineering is undergoing a transformation motivated by mission and system complexity, and enabled by technological advances such as model-based systems engineering, digital engineering, formal modeling, and the convergence of systems engineering with other disciplines. This conference is focused on exploring recent trends and advances in model-based systems engineering (MBSE) and the synergy of MBSE with simulation technology and digital engineering. Researchers have submitted papers on MBSE methods, modeling approaches, standards, languages, and economics analysis to respond to the challenges posed by 21st century systems.

### 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 on Systems Engineering Research (CSER)** offers researchers, engineers, and government agencies a unique opportunity to present, discuss, and influence the future of systems engineering research. It provides a platform for sharing research from across the globe. We have been continuously monitoring the situation concerning the Coronavirus and have been planning for contingencies. Given the escalation in the number of cases and the travel restrictions, many attendees have cancelled, making postponement the only viable action. Rest assured that after CSER2020 is rescheduled, all accepted presenters, tutorials, workshops, and keynotes will be reprogrammed. Stay tuned for the announcement of new dates.

### Conference Co-Managers



**Mr. Terry Rector**  
The Aerospace Corp.



**Mr. Eric Belle**  
INCOSE LA

**USC Viterbi**

School of Engineering  
Systems Architecting and Engineering





# 18<sup>th</sup> Annual Conference on Systems Engineering Research (CSER)

Crowne Plaza Hotel, Redondo Beach, CA

## Recent Trends and Advances in Model-based Systems Engineering

### Keynote Speakers



**Gen. (Ret.) Ellen M. Pawlikowski**  
Judge Widney Professor,  
University of Southern  
California



**Lt. Gen. (Ret.) Larry James**  
Deputy Director,  
Jet Propulsion Lab



**Mr. Scott Miller**  
Executive Chief Engineer,  
Automated Driving, and  
Executive Director, AV/EV  
Integration, GM



**Mr. Jon Damush**  
Senior Director,  
New Business Ventures,  
Boeing NeXt



**Prof. Garrett Reisman**  
Astronautical Engineering,  
University of Southern  
California

### Banquet Speaker

### Tutorials and Workshops

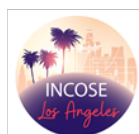
- **Model-Based Systems Engineering Overview** (Dr. Michael Sievers, University of Southern California)
- **Parallel Agile** (Mr. Doug Rosenberg, University of Southern California)
- **Preparing MBSE for Industry 4.0 & IOT** (Dr. Dov Dori, Technion - Israel Institute of Technology)
- **Data Analytics** (Dr. Courtney Paulson, Southern Utah University)
- **Enterprise Modeling using UAF** (Mr. Barry Papke, 3DS)
- **NSF Workshop - Systems Engineering Challenges & Opportunities** (Dr. Richard Malak, Texas A&M University)
- **Working Group Workshop - Foundation for Systems Engineering** (Dr. David Rousseau and Dr. James Martin)

### Invited Panels

- **Smart Manufacturing: Recent Trends and Success Stories** (Chair: Prof. S. K. Gupta, Director, Center for Advanced Manufacturing, USC, Panelists: Mr. Gerald Deren, Siemens Digital Industries Software, Mr. Greg Colvin, Honeywell-Aerospace and Mr. Robert Kelly Dodds, Raytheon Space and Airborne Systems)
- **Research Agenda for Mission Engineering** (Co-Chairs: Dr. Judith S. Dahmann, MITRE Corporation and Dr. Daniel A. DeLaurentis, Purdue University)
- **Exploring Digitization of Human Bias** (Moderator: Dr. Shamsnaz Bhada, WPI, Panelists: Dr. Cecilia Haskins, NTNU, Dr. Donna Rhodes, MIT, Dr. Mark L. McKelvin, Jr., The Aerospace Corporation, Dr. Tom McDermott, Stevens Institute)
- **Round Table - Modeling and Analysis of Socio-Technical Networks** (Dr. William E. Hubbard, and Dr. Mike Richey, The Boeing Company)
- **Executive Leadership Panel** (Moderator: Ms. Marilee Wheaton, The Aerospace Corporation, Panelist: Dr. Robert Minnichelli, The Aerospace Corporation, Dr. Joseph D'Ambrosio, General Motors, Mr. Marcus Nance, The Boeing Company, Ms. Padma Sundaram, General Motors, and Mr. Scott Lucero, DoD)

For More Details Please Visit:

[cser2020.org](http://cser2020.org)



2020 INCOSE WESTERN STATES REGIONAL CONFERENCE

## Celebrating the Sound of Systems Engineering!

September 17-19, 2020  
Seattle, Washington



## WSRC 2020

An opportunity to enhance your skills and network at a world-class conference in the beautiful Pacific Northwest. Standby for more details online and in future *Newsletters*

### A SPECIAL BONUS

WSRC2020 will feature an INCOSE Systems Engineering Professional Development Day (SE PDD) on Friday, September 18. The SE PDD will be a virtual extension of the conference, with the featured sessions broadcast from SPU to several satellite sites across the region. Presentations and panels may be selected for participation in the SE PDD.

The Seattle Metro Chapter of INCOSE is hosting the third annual Western States Regional Conference, serving the systems engineering communities across the western United States and beyond. The conference will feature keynote presentations, tutorials, technical presentations, panel discussions, and networking events.

The venue is Seattle Pacific University (SPU) near downtown Seattle and convenient to numerous business and entertainment opportunities.

The conference theme is ***Celebrating the Sound of Systems Engineering!*** We want to acknowledge and celebrate successful application of systems engineering in the Puget Sound area and throughout the western United States and to identify future activities of potential value. Specific areas related to the INCOSE Vision 2025 include new industry domains, new technologies, and newer methodologies like Model-Based Systems Engineering and Artificial Intelligence.

The WSRC Program Committee is building the program by contacting candidate keynote speakers and panelists, and by reviewing candidate presentations.

The call for presentations and panel discussions was open to any submission with a baseline of six interest areas:

- Healthcare and Medical Devices
- Critical Infrastructure: Communications, Energy, Food and Agriculture, Transportation
- Aviation and Space Systems
- E-Commerce, Cloud Services, and System Security
- Autonomous Systems and Resilience
- Education and Workforce Development

Links to the call for Proposals:

<https://www.incose.org/wsrc/wsrc2020/home/>,  
or EasyChair

<https://easychair.org/conferences/?conf=wsr2020> ?



INCOSE-LA Chapter NEWSLETTER

Vol. 18, Issue 2, April — May 2020

## II et II est IV

Julius Caesar, circa March 14, 44 B.C.  
attributed?

$$2 + 2 = 4$$

Miss Wilson, second grade teacher,  
Twentieth Century A.D.

While some great Indian minds came up with powerful tools such as unique symbols for numbers, the zero, and the decimal point, it would behoove the systems engineer to remember that :

**the basics are unchanged.**

Quote attributed to Albert Einstein, written in a letter to his friend, psychiatrist Otto Juliusburger, in 1948:

"I believe that the abominable deterioration of ethical standards stems primarily from the mechanization and depersonalization of our lives," he "a disastrous byproduct of science and technology. Nostra culpa!"

Quote attributed to Perry Belcher, co-founder, digitalmarketer.com:

Nothing will kill a great employee faster than watching you tolerate a bad one.

Quote attributed to Aesop:

We hang the petty thieves and appoint the great ones to public office.

Quote attributed to Ernest Hemmingway:

Critics are men who watch the battle from a high place and then come down and shot the survivors.

Old Jewish Proverb:

Whoever rebukes a person will in the end gain favor rather than one who has a flattering tongue.

## Great Leaders Always Evolve

### Engineer a Personal and Organizational Transformation

Today's revolutionary connected devices require creative technical leadership. Professionals charged to build advanced, intelligent systems meet in Caltech CTME courses, workshops, and labs to acquire hands-on experience. Ready to ignite your career?

**Advanced Systems Engineering**  
**Aerospace Operations Analytics**  
**Machine Learning + Deep Learning**  
**Managing Cybersecurity Operations**  
**Advanced Project Management**  
**Model-Based Systems Engineering (MBSE)**

Custom Learning for the Science & Technology-Based Enterprise

Attend or contact a program advisor to  
customize a program for your organization:

626.395.4045 | [execed@caltech.edu](mailto:execed@caltech.edu) | [ctme.caltech.edu](http://ctme.caltech.edu)

**Caltech**

Center for Technology &  
Management Education

## Not a member? Join INCOSE!

Learn more about becoming a member by clicking on:

<https://www.incose.org/incose-member-resources/join-incose>

### 2020 Board of Directors

#### Elected Officers

President/ Immediate Past President	Mark McKelvin	<a href="mailto:president@incose-la.org">president@incose-la.org</a>
Vice President	Mark TenEyck	<a href="mailto:vicepresident@incose-la.org">vicepresident@incose-la.org</a>
Secretary	Phyllis Marbach	<a href="mailto:secretary@incose-la.org">secretary@incose-la.org</a>
Treasurer	Rick Hefner	<a href="mailto:rhefner@caltech.edu">rhefner@caltech.edu</a>

#### Elected At-large Directors

Communications Committee Chair	Scott Birtalan	<a href="mailto:communications@incose-la.org">communications@incose-la.org</a>
Membership Chair	Karen Grothe	<a href="mailto:membership@incose-la.org">membership@incose-la.org</a>
Programs Committee Chair	Nazanin Sharifi	<a href="mailto:programs@incose-la.org">programs@incose-la.org</a>
Systems Engineering Education	Dorothy Benveniste	<a href="mailto:djbenven@ca.rr.com">djbenven@ca.rr.com</a>
Ways and Means Chair	Shirley Tseng	<a href="mailto:shirleytseng@earthlink.net">shirleytseng@earthlink.net</a>

#### Appointed Positions

Newsletter Editor	Jorg Largent	<a href="mailto:newsletter@incose-la.org">newsletter@incose-la.org</a>	Registrar	Paul Cudney	<a href="mailto:paulcudney@dslextrame.com">paulcudney@dslextrame.com</a>
Speaker Meeting Site Host	Deborah Cannon	<a href="mailto:Deborah.a.cannon@aero.org">Deborah.a.cannon@aero.org</a>			

## INCOSE-LA Chapter NEWSLETTER

Vol. 18, Issue 2, April — May 2020

**The Board of Directors wishes to welcome the following new members  
to 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	Organization
Amar Birdi	
William Simpkins	LinQuest
Edward Chen	LinQuest Corp
Jonathan Haag	
Brian Schroepfer	
Charles Brechtel	Prewitt Ridge
Ramon Tolentino	SAIC
Swati Acharya	
Ruth Lopez	LinQuest Corporation
elias mankouche	Dassault Systemes
David Shahal	ESI Motion
Steven Massey	Prewitt Ridge
William McConville	Loyola Marymount University
Daniel Mattick	
Timothy ORourke	
Amelia Taylor	Power Bloom Solar, Inc.
Pavithra Sripathanallur Murali	Loyola Marymount University
Clifford Cousins	Boeing
Luis Gonzalez	California State University, Long Beach
Justin Parker	Loyola Marymount University

Adversity has the effect of eliciting talents which,  
in prosperous circumstances, would have lain dormant.

Attributed to Horace

**Not a member? Join INCOSE!**

Learn more about becoming a member by clicking on:

<https://www.incose.org/incose-member-resources/join-incose>

**INCOSE-LA Chapter NEWSLETTER**

Vol. 18, Issue 2, April — May 2020

# INCOSE-LA Chapter NEWSLETTER

Vol. 18, Issue 2, April — May 2020

Return Address:

PO Box 10969  
Westminster, CA 92685-0969

## Forwarding Service Requested

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization founded to develop and disseminate the interdisciplinary principles and practices that enable the realization of successful systems. INCOSE's mission is to share, promote, and advance the best of systems engineering from across the globe for the benefit of humanity and the planet.

The Los Angeles Chapter meets several times per year for speaker meetings and, in addition, sponsors tutorials, mini-conferences and other activities of interest to those in systems engineering or related fields.

## UPCOMING EVENTS

For more information on these and other events of interest in the Los Angeles area, look for an e-notice from the Chapter in your email, and check the Chapter website: [www.incose.org/los-angeles](http://www.incose.org/los-angeles). Please like us on Facebook.

### April Speaker Meeting

Larry Haas, founder and CEO of Global Aperture LLC,  
*Case Studies in SOS to ROI Transformation:  
The Top Five Mistakes Leaders Make  
When Battling the Complexity Monster*

See article on page 3  
Tuesday, April 14, 2020  
5:30 p.m. — 8:00 p.m.

**NOTE; DUE TO THE CORONAVIRUS ISSUE  
THIS MEETING WILL BE HELD VIRTUALLY  
(AND FUTURE MEETINGS AS WELL,  
UNTIL FURTHER NOTICE)**

### May Speaker Meeting

Tuesday, May 12, 2020  
5:30 p.m. — 8:00 p.m.  
*Details in work*

### Western States Regional Conference

Celebrating the Sound of Systems Engineering  
September 17 — 19, 2020  
Seattle Pacific University  
Seattle, Washington

*See advertisement on page 7*

*For more information go to:*

<https://www.incose.org/wsrc/wsrc2020/home>

### Conference on Systems Engineering Research

Being Rescheduled

See article on page 1 advertisement on pages 5, 6

*For more information go to <https://cser2020.org/>*

**For the latest information and registration on  
these and other upcoming Chapter events,  
go to the Chapter website at  
[www.incose.org/los-angeles](http://www.incose.org/los-angeles)**