



SE REVIEW



February 2009

Volume 9, Number 2



Next Board Meeting
5 March 2009
1630
Booz Allen
Hamilton
Expedition Bldg

Next Chapter Meetings
24 February 2009
1800
Do Dah Deli,
Leonardtown, MD
(INCOSE Members Only)

26 February 2009
1130-1300
Pax River O'Club

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President's Perspective

Colleagues,

We have successfully inducted our new Board of Directors for 2009, and things are already ramping up for an active and engaged Spring events calendar for the Southern MD Chapter of INCOSE. On 31 January, we had 7 of our Chapter members come out to judge and award middle school and high school students participating in the Science Fair. We specifically sought out science fair projects where systems engineering practices were inherent in the body of work. The students did a wonderful job of addressing complex issues where systems engineering rigor is part of the solution set. This year we awarded a total of \$800 to 10 participants. Further details are included in this newsletter, and we will have an awardee luncheon with CAPT Scassero as the presenter on 17 March. These projects will be brought out and discussed with INCOSE members.

We then had four members out to the West Coast to attend the INCOSE International Working Group session, which covered a myriad of topics and shaped the areas where INCOSE International will be focused for the 2009 season. Planning has begun in earnest for our luncheon speakership program with a number of topics and speakers already committed. We have engaged with the AUVSI Student UAS Competition, 16-20 June 2009, and are actively seeking INCOSE members interested in judging roles and participating in helping to successfully orchestrate this annual event.

Our biggest near-term event is the Mid-Atlantic Regional Conference (MARC), "**Systems Engineering – Affordable Success**". Activities are well underway, and we encourage attendance, participation at the speaker and tutorial levels, and industry partners sponsorship to make this event in Suffolk, VA on 2-4 April a success. Details are available at: <http://www.incose-spring09.org/>, and further highlights for the event are provided later in this newsletter.

Before I forget, don't miss out on this week's events:

- There is a members-only **INCOSE Connect Demonstration** at the Godfather Room at the Do Dah Deli, 25470 Point Lookout Rd. Leonardtown, MD (just south of the St. Mary's County Hospital on Maryland Route 5) on Tuesday, 24 February at 6:00 pm. For members, there is such a thing as a FREE DINNER! Bring your laptop, and you can access the site via a wireless connection. Please RSVP to president@INCOSE-SoMD.org, if you can make it!
- On 26 February at 1130 at the O'Club, we will have Dr Jen Narkevicius discussing **Human Systems Integration in Systems Engineering Practice** and where INCOSE International is heading within this discipline.

That's it for this month. Looking forward to seeing you at one of our events. On behalf of the new Board of Directors, we look forward to your continued support and engagement with INCOSE Southern MD.

Respectfully,

Steve McKeown
President, Southern Maryland Chapter
president@INCOSE-SoMD.org

INCOSE News

300 Certified SE Professionals

In December of 2008, INCOSE's certification program reached the milestone of more than 300 active world-wide Certified Systems Engineering Professionals (CSEPs). As of 31 December 2008, there were 302 active CSEPs. According to David Walden the Certification Program Manager, "INCOSE is excited about reaching this milestone and we expect continued growth as the CSEP designation becomes recognized as a valuable investment for individuals and organizations and the world-wide standard for Systems Engineering professional recognition."

Communication from International

There has been a change in leadership for Communications. Headquarters has stated that news (such as E-Note) will start up again soon.

The location for the International Workshop for 2010 has not been determined yet, but it will be "someplace warm". The International Symposium for 2010 will be located in Chicago, Illinois. Details on these events are forthcoming.

Schedule of *INSIGHT* Deadlines

The following is a list of upcoming INCOSE *INSIGHT* deadlines:

SUBMISSION DATE	PUBLICATION DATE	THEME	THEME EDITOR
15 May 2009	July 2009	The Interplay of Architecture, Systems Engineering, and Security	Rick Dove
3 July 2009	October 2009	East Meets West - The Human Dimension to Systems Engineering	Pearly Chua
15 November 2009	December 2009	Model-Based Systems Engineering: The New Paradigm	Rob Cloutier

Renew Your Membership

Don't forget to renew your membership. Your annual membership now expires 12 months after your enrollment anniversary. If you want to know what your enrollment date is and when your current membership will expire, just view your member profile <https://www.incose.org/membersOnly/memberInfo/updateMemberInfo.cfm>. Should you have problems or questions, e-mail Central Office (<mailto:info@incose.org>).

Update your membership profile

Did you know that you have the ability to reset your own password, change your address, phone number and employer, and even change the e-mail addresses you want your incose.org e-mails to go to? Did you know that you can also update your biography and even your picture? To keep your membership information up to date, just go to www.incose.org. On the left side, select the option to View / Update Member Record.



Chapter *Highlights*

Outreach: *Feature Story!*

2009 St. Mary's County Maryland Science and Engineering Fair Award Winners

By John Walker

The 49th Annual St. Mary's County Science and Engineering Fair was held on January 30-31, 2009 at Great Mills High School, Great Mills, Maryland. The Science and Engineering Fair is sponsored by the St. Mary's County Science and Engineering Fair Board, a volunteer non-profit organization with the support of St. Mary's County Public Schools and corporate and individual donations. INCOSE Southern MD had seven volunteers go through the entire exhibit of Junior and Senior entrants exhibits looking for those specific exhibits where sound systems engineering practices were evident and effectively applied. After 10 specific Junior and Senior exhibitors were identified, the review team returned to each exhibit and asked questions of the students about their methodology and findings. This is very exciting as you can see the passion and enthusiasm of the entrants as they discuss their projects.



Selected projects will have the opportunity to compete at the Annual Prince George's Area Science Fair. The Prince George's Area Science Fair brings together over 400 student competitors from Prince George's, St. Mary's, and Calvert Counties. Dr. Al Hovlander from St. Mary's College of Southern MD was the President of the Fair and was inspirational to the students that were there. For our Chapter, we awarded a total of \$800 to 10 luck recipients.

INCOSE Awardees for 2009 include:

Senior First Place, Julie Walker, "Look at this M.E.S.: Mars Environmental Simulator"; Senior Second Place, Mark Ragland, "Submerged Laser Communication"; Senior Awards, Brendan Tomasic, "Engine Powered by Air"; Senior Awards, Rachel Husted, "Staying in Your Comfort Zone"; Senior Awards, Kelles Gordge, "Global Meltdown! – Phase II"; Junior First Place, Todd Roberts, "4 Wings, 1 Challenge"; Junior First Place, Michael Lopez, "Solar vs. Wind"; Junior Second Place, Laura Pagliarula, "Capturing the Wind's Energy"; Junior Awards, Kathryn Jahn, "Think Big, Go Small: Alternative Energy"



As we have done in the past, we will be having the students come out on 17 March at the Officer's Club to a luncheon for the students and a guest. They will have their Science Fair entries on display, and CAPT Matt Scassero will be presenting each student with their award. Plan on coming out to this event to see these very worthy projects!

Member Profile

Please welcome our new members:

Barry Shobe joined on 16 February. He is a Principal Engineer at Shobe Engineering Corporation. His e-mail is bjshobe@shobeengineering.com, and phone number is (410) 353-2365.

Edward Copeland joined on 19 February. He is a Avionics Chief Engineer for NAVAIR. His e-mail is edward.copeland@navy.mil, and phone number is (301) 342-9154.

Member Contributions & Support Needed

We are in desperate need of more help, more involvement, more members, and more leadership from our current members to maintain our ambitious schedule of events. Also please send news on your projects at work, on your personal or professional achievements, any notable upcoming events the membership should know about, etc. Send electronic pictures, too! We continue to request that each of the Chapter members provide us with a brief bio, so everyone will get to know you a little better. This will also make it easier to network with other Chapter members. Please include items such as where you went to school and any degrees, current and past positions, INCOSE activities, and any other information you would like to share. Our newsletter can use your articles and your support. Please send all contributions to Karl Geist at kgeist@md.metrocast.net, Dawn Jaeger at Dawn.Jaeger@navy.mil, or Steve McKeown at mckeown_steve@bah.com. If you have any questions, please send an e-mail or call Dawn at 301-757-0907, or Steve at 301-862-7033. So, please consider volunteering and being part of the exciting opportunities in Systems Engineering. As current members, the Chapter Board of Directors (BOD) welcomes your feedback to the chapter's plans. Address these comments to any of the Chapter's BOD members found at the end of this newsletter. Thank you!

Upcoming Events

Southern Maryland Chapter Meeting

Hosted by INCOSE SoMD Chapter in Patuxent River, Maryland

When: 24 February 2009, 1800

Where: The Godfather Room at the Do Dah Deli, Breton Marketplace, 25470 Point Lookout Rd., Unit 3, Leonardtown, MD (just south of the St. Mary's County Hospital on Maryland Route 5)

Theme: INCOSE Connect Walk-through

Info: www.incose-somd.org

Speaker: John Walker

POCs: RSVP by February 18th to Steve McKeown, (301) 862-7033 or

Steve.McKeown@INCOSE-SoMD.org

Venue: Sandwiches

Cost: Free for SoMD INCOSE Chapter members

Description: A collaboration workspace for the INCOSE community, Connect supports distributed, asynchronous collaboration for INCOSE's many teams — international leadership bodies, chapter leadership teams, working groups, project teams, and symposia host committees. It is also home to the INCOSE product area and the INCOSE event archive. Join colleagues at this free INCOSE Southern Maryland Chapter **members only** event for a tutorial demonstrating Connect's useful tools.

Southern Maryland Chapter Meeting

Hosted by INCOSE SoMD Chapter in Patuxent River, Maryland

When: 26 February 2009, 1130-1300

Where: Cedar Point Officer's Club

Theme: Human Systems Integration

Info: www.incose-somd.org

Speaker: Jennifer Narkevicius

Upcoming Events (cont.)

POCs: Dawn Jaeger at 301-757-0907, Dawn.Jaeger@navy.mil or Judy Walker at 301-342-2164, Judy.Walker@INCOSE-SoMD.org

Venue: Buffet

Cost: \$5.00 for SoMD INCOSE Chapter members, \$8.00 for Non-members

Description: A collaboration

Second International Conference on Model-Based SE (MBSE'09)

Hosted by the Israeli Chapter of INCOSE

When: 2-5 March 2009

Where: Herzeliya and Haifa, Israel

Info: <http://www.mbse-org.org>

POC: Prof. [Dov Dori](mailto:dori@ie.technion.ac.il), Technion, Israel dori@ie.technion.ac.il

Description: The Conference is a premier forum for the elicitation and exchange of ideas on issues and problems regarding systems engineering and its relation to the development, evolution, adoption, evaluation, and dissemination of languages, methodologies, and approaches for conceptual models of complex systems. The objective is to improve practices of Model-Based Systems Engineering by endowing this evolving discipline with missing theoretical and methodological underpinnings and improving the communication of complex systems' function, structure, and behavior among stakeholders. In addition to research and papers, the conference will feature invited speakers, tutorials, and an industrial exhibition.

Systems Engineering Summit: Harnessing Best Practices

Hosted by Huntsville Regional Chapter

When: 3-4 March 2009

Where: Bob Jones Auditorium and Sparkman Center on Redstone Arsenal, Huntsville, Alabama

Theme: Harnessing Best SE Practices

Info: <http://www.incose.org/huntsville/summit.html>

Cost: Free

POC: Larry Smith at larry.smith8@us.army.mil or (256) 313-5157

Description: Speakers will be from Industry and Government. This SE Summit is being co-sponsored by the US Army (RDECOM-AMRDEC), NASA, and the Defense Acquisition University. Registration ends 20 February 2009. The Summit has two goals:

- To present to local systems engineers best practices from industry and government leaders in systems engineering
- To present workshops and tours to advance the systems engineering practice

Southern Maryland SPIN Chapter Meeting

Hosted by SoMD SPIN Chapter

When: 4 March 2009, 1700-1900

Where: Frank Knox Building, Room 120

Theme: Innovations in Process Design and Development

Speaker: Michael West of Natural Systems Process Improvement (SPI)

Info: <http://www.somdspin.org/>

POC: Liz Burnett at 301-862-7398, Liz.Burnett@ManTech.com

Venue: Food and Refreshments

Cost: Free

Description: Many software organizations today are using 21st century technology to develop software, but are using 20th century methods to define their engineering processes. Last century's process representations do not enable technical individuals and teams to perform processes effectively and efficiently. This talk unveils advanced concepts in process design and definition that resolve the problems inherent in the common text-based process description approach and will inspire the audience with breakthroughs in process design and definition.

Upcoming Events (cont.)

Human Systems Integration Symposium (HSIS) 2009

Sponsored by American Society of Naval Engineers and the Human Factors Ergonomic Society

When: 17-19 March 2009

Where: Loews Annapolis Hotel, Annapolis, Maryland

Theme: Human Systems Integration: 2+2=22! Greater than the Sum of its Parts

Info: <http://www.navalengineers.org/Events/HSIS09.html>

Description: Building on the broad successes of HSIS events since 2001, HSIS 2009 is a "must-attend" for anyone who wants to learn more about the value of HSI, how and when to apply HSI concepts, and successful implementations of HSI activities.

Project Management Institute (PMI) Monthly Luncheon

Sponsored by PMI SoMD Chapter

When: 18 March 2009, 11:30-1:00

Where: NAS Officer's Club, Patuxent River, MD

Theme: Challenges of Earned Value with Software

Speaker: Ms. Amy Caruso

Info: <http://www.onepmi.org/PMIWeb/OneColumnPage.aspx?PageID=462>

POC: Tanya Bassett at (240) 298-7392 , president@pmisomd.com

Venue: Hot Buffet

Cost: \$10 with a chance to win a door prize

Architecting with DOD Architecture Framework (DODAF)

Presented by Honourcode, Inc.

When: 31 March - 1 April 2009

Where: Laurel, Maryland

Info: <http://www.hcode.com/crsinfo-archdodaf.htm>

Cost: \$990.00

POC: BetterSE@hcode.com, (850) 479-1985

Description: Today's systems do not stand alone; each system fits within an increasingly complex system-of-systems, a network of interconnection that virtually guarantees surprise behavior. Systems science recognizes this type of interconnectivity as one essence of complexity. It requires new tools, new methods, and new paradigms for effective system design. The DODAF provides an underlying structure to work with complexity.

This course provides knowledge and exercises at a practical level in the use of the DODAF. You will learn about architecting processes, methods and thought patterns. You will practice architecting by creating DODAF representations of a familiar, complex system-of-systems. By the end of this course, you will be able to use DODAF effectively in your work.

Certified Systems Engineering Professional (CSEP) Preparation

Presented by Honourcode, Inc.

When: 2-3 April 2009

Where: Laurel, Maryland

Info: <http://www.hcode.com/crsinfo-csep.htm>

Cost: \$990.00

POC: BetterSE@hcode.com, (850) 479-1985

Description: The INCOSE Certified Systems Engineering Professional (CSEP) rating is a useful and coveted milestone in the career of a systems engineer, demonstrating knowledge, education and experience that is of high value to systems organizations. The certification requires passing an extensive examination based on the INCOSE Systems Engineering Handbook v3.1. This two-day course provides you with the detailed knowledge and practice that you need to pass the CSEP examination.

This course walks through the CSEP requirements and the INCOSE Handbook to cover all topics that might be on the CSEP exam. Interactive work, study plans, and sample examination questions help you to prepare effectively for the exam. Participants leave the course with solid knowledge, a hard copy of the INCOSE Handbook, study plans, and a sample examination.

Upcoming Events (cont.)

Region V INCOSE Spring 09 Conference

Hosted by INCOSE Region V Chapters

When: 2-4 April 2009

Where: Virginia Modeling Analysis and Simulation Center, Suffolk, VA

Theme: Systems Engineering – Affordable Success

Info: <http://www.incose-spring09.org>

POC: Conference Chair, Karl C. Geist at kgeist@md.metrocast.net or 301-475-5646

Description: The conference will focus on the means and tools to lead and create processes or organizations that develop affordable systems. It is known that systems complexity has dramatically increased over the last several decades. It is therefore even more important now than in the past to develop leaders and processes to more cost effectively track development costs, calculate complexity, and leverage known solutions and techniques.

Fundamentals of Systems Engineering

Presented by Honourcode, Inc.

When: 6-7 April 2009

Where: Laurel, Maryland

Info: <http://www.hcode.com/crsinfo-fse.htm>

Cost: \$990.00

POC: BetterSE@hcode.com, (850) 479-1985

Description: Today's complex systems present difficult challenges to develop. From military systems to aircraft to environmental and electronic control systems, development teams must face the challenges with an arsenal of proven methods. Individual systems are more complex, and systems operate in much closer relationship, requiring a system-of-systems approach to the overall design.

This workshop presents the fundamentals of a systems engineering approach to solving complex problems. It covers the underlying attitudes as well as the process definitions that make up systems engineering. The model presented is a research-proven combination of the best existing standards.

7th Annual Conference on Systems Engineering Research

Hosted by Loughborough University, University of Southern California, and Stevens Institute of Technology

When: 20-22 April 2009

Where: Loughborough University, Loughborough, England, UK

Info: <http://cser.lboro.ac.uk/>

POC: r.s.kalawsky@lboro.ac.uk

Description: The primary conference objective is to provide practitioners and researchers in academia, industry, and government with a common platform to present, discuss and influence Systems Engineering research with the intent to enhance Systems Engineering practice and education.

21st Annual Systems & Software Technology Conference (SSTC 2009)

Sponsored by United States Army, United States Marine Corps, United States Navy, United States Air Force, and Defense Information Systems Agency (DISA)

When: 20-23 April 2009

Where: Salt Lake City, Utah

Theme: Technology: Advancing Precision

Info: www.sstc-online.org

Cost: \$895 – Through 22 March 2009

\$995 – After 22 March 2009

Discounts Available:

\$100 – Military/Government (must have GS Rating or Equivalent)

\$100 – Paper Reviewer

Speaker Rate: \$395/full conference

POC: sstc-info@ext.usu.edu or (435) 797-0423

Description: The SSTC conference has elaborated on the concept behind the theme: If we look back over the past couple of years, one can conclude we haven't

Upcoming Events (cont.)

seen huge leaps in new technologies. Programming languages have had some stability. The probability of a new computer language being introduced, similar to the flurry around Ada's initial release, is somewhat low. What we are seeing, as far as recent advancements, are little tweaks to proven technologies which are having the effect of paying large dividends in the areas of performance, cost, schedule, time to delivery, communications, command and control, and weapons targeting, just to name a few. SSTC 2009 will focus on exploring how we, as a community, can affect Systems and Software by fine tuning technology, thus advancing the precision of technology.

Save the Dates! Conference registration opens 5 January 2009. Mark your calendar now and plan to join us for excellent, quality presentations and networking with colleagues from military/government, industry and academia.

Systems of Systems

Presented by Honourcode, Inc.

When: 9-11 June 2009

Where: Washington, DC

Info: <http://www.hcode.com/crsinfo-sos.htm>

Cost: \$1,390.00

POC: BetterSE@hcode.com, (850) 479-1985

Description: Today's environments are dominated by complex systems of systems. As a result, systems engineers now have the responsibility to create systems of unprecedented scope and complexity. These objectives are not the only challenge. The development environment for a system of systems is typically characterized by its own unique challenges, such as an extended life cycle, requirements to use legacy systems as components, and ongoing re-architecting throughout the lifecycle of the system and its component systems. Success under these conditions requires developing a sound design, managing complexity, maintaining the integrity of that design, and supporting shifting operational priorities over significant time spans while avoiding the lurking potential of chaotic conditions.

To meet these challenges, this course presents detailed, useful techniques to develop effective systems of systems and to manage the engineering activities associated with them.

2009 INCOSE International Symposium

The 19th International Symposium -- Hosted by Region VI Chapters of Australia, Beijing, Japan, Korea, Singapore, and Taiwan

When: 19-23 July 2009

Where: Suntec International Convention and Exhibition Centre, Singapore

Theme: East Meets West: The Human Dimension to Systems Engineering

Info: <http://www.incose.org/symp2009> <http://www.incose.org/symp2009/>

POC: ASK International Conference, is2009@askintlconference.com

Description: The theme for INCOSE 2009 highlights the dramatic expansion in the scope of contemporary Systems Engineering where the human cognitive dimension is becoming an integral part in the Systems Engineering processes. Future systems, where the machines are designed around the man, will benefit from Systems Engineering best practices and processes. Systems Engineering methodologies have been successfully applied to designing large-scale complex engineering projects that are multi-disciplinary in nature.



SoMD BOARD OF DIRECTORS

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