



Midwest Gateway Newsletter

International Council on Systems Engineering

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President's Corner

John Headrick
2012 President
MWG Chapter INCOSE

First I need to introduce myself as your 2012 President of the Midwest Gateway Chapter of INCOSE. I look forward to working with you and our Board of Directors as we plan an active and progressive year in Systems Engineering. And now a little news.

First a small look back. We closed 2011 with our December 8th annual Appreciation Social at Spazio's Westport. Along with the appreciation recognition of the 2011 officers, the Best 2011 Program Best Paper award went to Jim Carlson and Dale Waldo for the INCOSE/MSPE Workshop at Washington University.

We were all saddened at the sudden loss of an initial member of our

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Practical Application of Chaos Theory to Systems Engineering

Bill Bezdek, who attended the January Monthly Meeting Presentation by David Curry: "Practical Application of Chaos Theory to Systems Engineering" wrote the following:

We had 16 engineers and several others on the phone / Webex attend a presentation by Dave Curry on chaos theory in Building 305 at Boeing on the 18th of January, 2012. David gave us a preview of his briefing which he is scheduled to present at the 10th Annual Conference on Systems Engineering Research (CSER) in St. Louis.

Dave provided an intriguing discussion as he showed how chaos theory has been successfully applied to predict the long-term behavior of numerous biological systems using a technique known as a "Recurrence Plots". He also showed other examples to increase our understanding. The same methods should prove useful in Systems Engineering as well. Included in the pictures is Dave and John Headrick, our new Midwest Gateway Chapter President.



Dave Curry and John Headrick



Dave Curry presenting



President's Corner cont'd

Midwest Gateway chapter, Bill Schoening. In 1992, Bill was the chapter's first President. Over the years he served as INCOSE President, Chapter Board of Directors, and Chapter Treasurer. He was a Boeing Technical Fellow as well as an INCOSE Fellow. In recognition of his long time service to our Midwest Gateway Chapter, we initiated the "William W. Schoening Memorial Outstanding INCOSE Midwest Gateway Chapter Member" award and presented it to Bill post-humously. In the future, this award will be presented in recognition of dedicated service and commitment to the advancement of systems engineering. Bill will be missed by all of us involved in systems engineering and INCOSE.

Already in 2012 MGC INCOSE members have been active with professional outreach and development programs. In January Bob Scheurer attended the International Workshop in Jacksonville, Florida and is now "Assistant Director for the Americas" with INCOSE. Also in January I attended the System of Systems conference by International Test and Evaluation Association where John Thomas, the 2012 President of INCOSE, made a very excellent presentation on cooperation between Systems Engineering and Test & Evaluation.

Our January Professional Development Program was a preview of David Curry's "Practical Application of Chaos Theory to Systems Engineering" which will be presented at CSER 2012. In February we had our first international professional development program when Gurvinder Kalyan, Boeing Systems Engineer/Analyst in United Kingdom presented "Use Of ExtendSim In Simulation For Systems

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Remembering a Systems Engineering Icon

By Bob Scheurer

Systems engineering is a unique discipline for many reasons. What sets it apart from the other engineering disciplines is its heavy dependence on relationships and integration. Engineers who were formally trained in the "hard skills" of their particular science or engineering field often find special challenges in the abstract or "soft skills" attributes needed to be effective systems engineers; e.g., interpersonal relationships, leadership, negotiation skills, selling abilities, etc. Being accomplished at both the soft and hard skills, while establishing relationships and integrating elements in a system, make for an especially versed systems engineer. Mastering these makes for a very special systems engineer --or icon -- indeed.

Our systems engineering world lost an icon late last year with the passing of Bill Schoening. Bill was by all accounts a systems engineering icon, both in our Midwest Gateway chapter and throughout INCOSE worldwide. He could analyze a situation and rapidly arrive at an appropriate path forward. He had a studious approach which considered options before choosing the best one. He asked lots of questions. He challenged the status quo. He had the ability to gently sway you to see his point by causing you to think about other aspects of your approach that you may not have considered. He was big into the "what if's". For those who've seen it, how can we ever forget his briefing entitled "How Planning for Success Can Lead to Disaster"?

Bill left us far too soon, but his legacy will live on. Whether it's recalling his influence in our own working lives or reading one of his 58 published Systems Engineering Notes, we can continue to advance systems engineering and honor him in doing so. After all, we might not be able to replace this icon, but we can be assured that we'd be making him proud.

IW2012 Had Something for Everyone

By Bob Scheurer

INCOSE's annual international workshop, held this past January in Jacksonville, FL, offers the chance for the organization to review, discuss, and plan improvements. This year, IW2012, had something for everyone.

One of the primary discussion items was the transformation of the Member Board into a new worldwide organization comprised of three sectors. Member Board Representatives are now known as Assistant Directors. The Chairs of the Member Board have been replaced by Sector Directors. For the Americas, the Director is Ray Jorgensen.

Working groups use the International Workshop as their primary venue for face-to-face coordination. This year, some of the newer, more notable working groups were the In-Service Systems Working Group, System of Systems Working Group, System Science Working Group, and Student Division Working Group. There are many additional, more established working groups as well, such as the Requirements Working Group. Each has defined its mission and slate of activities for 2012. Most of them will meet again at the International Symposium 2012 in Rome, Italy this July.

A great deal more information regarding the outcomes of IW2012 can be

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INCOSE Joins with the Missouri Society of Professional Engineers (MSPE) to provide FIRST Lego League (FLL) Experience

As part of the Engineer’s week exhibit at the St. Louis Science Center, INCOSE members brought a minitable to allow students and parents to interact with the Lego Mindstorm Robot and discuss opportunities to form and join a team for the upcoming season. There were over 7500 visitors over the weekend, many from Scouting organizations and others to see a variety of exhibits from several universities and professional organizations in addition to the ones normally at the Science Center.

INCOSE research suggests many of our members decided to pursue a Science, Technology, Engineering or Math (STEM) career in the 9-14 age group and “kids love Legos”. Allowing students to get hands on experience with FLL was very well received and we had the opportunity to help some families find teams in their area.



President’s Corner cont’d

Engineering Applications.” We also had our annual outreach program at Saint Charles Community College where our chapter members encouraged students to consider Systems Engineering as a career.

Looking forward, on April 5th we will conduct a joint meeting with the Missouri Society of Professional Engineers for students from Washington University. It will be held at 5:30 p.m. on April 5 at the Boeing Prologue Room. We are also planning other excellent professional development programs for your education and pleasure.

As always, we are asking those with interesting and educational topics from our INCOSE membership. If you are willing, please contact one of your INCOSE board members for consideration.

IW2012... cont’d

found on the member-exclusive INCOSE Connect. To see what INCOSE is doing and plans to do in detail, please visit that site at: <https://connect.incose.org/default.aspx>

Quote of the Day



We judge ourselves by what we feel capable of doing, while others judge us by what we have already done.
-- Henry Wadsworth Longfellow

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