



The NorthCoast Interfacer



2008



2009 – 2013, 2015-2016



2014

President's Corner

Hi, what's new? That's a greeting that you may sometimes use when seeing a friend you haven't talked with for a while. In terms of the Chapter, one answer could be an Interim Chapter President...me. In August, you the Chapter membership, elected me to fill the Chapter President role, until such time as elections can be held.

I would like to thank Joe Stevens for his service to the Chapter as Vice President last year and President this year. Joe has a lot of energy around systems engineering and started several initiatives that hopefully will be beneficial to the chapter and area in the future. If I had to sum up these in one word, it would be *outreach*. Over the past year and a half, some of his initiatives included outreach to high schools in the Canton area, universities in northern Ohio, the Cleveland Engineering Society, and State of Ohio officials. Related to this was a half-day panel session that was held in Canton in 2017 and a dialogue between the Board of Directors and several Case Western Reserve University students earlier this year. Two students from Case are members of the Chapter, and the Board wants to continue to look for ways to continue that outreach and aid students at Case, and elsewhere, to grow in the systems engineering profession.

I would also like to take this opportunity to express my appreciation to several groups. First to you, the chapter members who elected me to fill in as Chapter President. I will do my best to serve you and make the Chapter activities meaningful. Second to the other Board of Directors members who have accepted me in my new role. And lastly, I would like to thank the whole team that was involved in planning and executing the 10th Anniversary event that was held in April. For a summary of the event see the April Newsletter.

The Chapter was involved in two great development opportunities in October. On October 19, the Chapter sponsored a Systems Engineering Professional Development Day, which consisted of a broadcast from the 2018 INCOSE Great Lakes Regional Conference, being held in Indianapolis. This is the second year that we have sponsored a remote site. A big THANK YOU to Joel Knapp for coordinating this.

EnergyTech held their conference the following week. EnergyTech is planned and coordinated by three of our Chapter members, John Juhasz, Ray Beach, and Chuck Alexander. The conference is built around the development of energy systems, both terrestrial and aeronautical, but it also offers opportunities for systems engineers involved in other areas. On Monday, a full day, *Fundamentals for Systems Engineering* was offered, and Thursday focused on the integration and intersection of systems engineering with project management.

Earlier I summed up the past theme as outreach. To that, I would like to add the word *engagement*. What you will hopefully see during my tenure is an increased emphasis on engaging more of the chapter members. Fairly soon, you will be hearing about plans to informally engage with chapter members over the next few months. And for those of you willing to get involved, I plan to make you aware of opportunities to do small micro-volunteer activities to aid the Chapter. I am a firm believer in the idea that you can't get any benefit, without first investing. So won't you consider investing some of your time? There is an adage out there that says many hands make light work. For several years, the Chapter has not had a program chair. When you think about trying to plan and execute 8-10 chapter meetings a year, it can seem intimidating. But what about just one; almost anyone can do that, especially if the topic/speaker has already been identified. I would love to see chapter members volunteer to take on one chapter meeting. Then a program chair would just have to coordinate those individuals and schedule the topics. Taking on one aspect of outreach could also be another micro-opportunity. Opportunities abound, no matter where you look, even coordinating the Systems Engineering Professional Development Day next year, or sitting at the INCOSE booth for EnergyTech 2019. If you are interested in learning more or in taking something on, please reach out to me or one of the other Board of Directors members. These are often great opportunities to demonstrate or grow leadership skills.

The last topic that I would like to address is a combination of Chapter Bylaws and elections. The Board of Directors is initiating an effort to review and update (if needed) the Chapter Bylaws. The primary driver for this is that the Bylaws require that they be reviewed periodically and that review is overdue. The Bylaws spell out the Chapter elected positions, including that the Vice-President becomes the President the following year. As we sought candidates for the vacant Chapter Vice President position earlier this year, some members indicated they would be more willing to serve as Vice President, if they did not have to automatically become President the following year. So that is one part of the Bylaws that we want to take a hard look at. As a result, we would like to defer elections for next year until after that review/update is completed, if it can be done timely. Hopefully you can see the merits of this, but, if anyone disagrees with deferring the elections, please let me know, so that we can evaluate options.

The Board of Directors is going to lead the review of the Bylaws, but would like to have other chapter members involved too. So here is another micro-volunteer opportunity. If you are interested in participating, let me know. We plan to kick off the effort on November 6. The goal

is to submit any revisions for Chapter vote shortly after the first of the calendar year and then proceed with elections.

I look forward to the Chapter continuing its outreach efforts and engaging with as many of you as possible.

Dennis Rohn

C-NO President 2018

INCOSE IW 2019

The 2019 INCOSE International Workshop is returning to Torrance, California. It is being held January 26-29, 2019 at the Marriott hotel in Torrance, where it has been held in the past. Additional details are available on the INCOSE IW2019 Website (<https://www.incose.org/iw2019/home>).



Workshop Hotel

The International Workshops are a chance for business meetings and for working groups to get together. Some working groups share information, while others work on specific products. There are a few presentations and plenary sessions, but the majority of the activity occurs in smaller groups. In the past, Model Based Systems Engineering has been a key topic. Consider attending and getting involved in a working group, as most are always looking for new members. There are various Working Groups that cover different areas, including specific application domains (e.g. space systems), process enablers, analytic enablers, and transformational enablers.

Project Performance International Training

Project Performance International (PPI) is a strong supporter of INCOSE and they are best known for the systems engineering training that they provide. I had an employee take one of their classes recently and they thought it was well done and she learned a lot. During the EnergyTech Conference, I spoke with Robert Halligan, who does a lot of the training. He is willing to provide Chapter members a 10% discount off the course fee for upcoming public training sessions. There are two training sessions coming up in Detroit that may be of interest.

Their 5-Day Systems Engineering course will be delivered in Detroit, Michigan on the 18-22 March 2019. This training provides an integrated approach to the set of management and technical disciplines that combine to meet requirements, maximize overall system effectiveness, enhance project success and reduce risk. A constant theme of this course is how to maximize value delivered to stakeholders, via valued outcomes such as time to market, cost of goods sold,

product capabilities and other qualities, strategic objectives, whatever the stakeholders value on a life-cycle basis. Further information may be found at <https://www.ppi-int.com/training/se5d/>.

Engineering Successful Infrastructure Systems is a new course that will debut in Detroit on the 25-29 March, 2019. This course is a five-day immersion in the successful engineering of infrastructure that delivers maximum value to stakeholders. The course is based on systems thinking, here applied to projects and engineering. And so, the course has a strong systems engineering foundation. Systems engineering as a discipline has been proven to substantially reduce costs, reduce project durations and increase client satisfaction. Further information may be found at: <https://www.ppi-int.com/training/esis5d/>.

When registering for these, or other PPI classes, identify yourself as a chapter member in order to obtain the discount.

Chapter Outreach to Students

On April 18, 2018, the C-NO Board of Directors met on the campus of Case Western Reserve University with seven CWRU engineering students. Joe Stevens (then C-NO President) arranged the meeting, in collaboration with student Ben Shrager.

The C-NO Chapter supplied pizza and soft drinks for the casual get together. The Board explored the students' backgrounds, career interests, and related concerns. Each Board Member shared glimpses of their various Systems Engineering roles.

Ben Shrager wrote:

Thanks for a successful meeting today! I got good feedback from my peers; they really enjoyed the discussion about systems engineering in general, and they loved hearing about the opportunities that are available with INCOSE.



Another CWRU student, James C. (“JC”) Schmidt, contacted Bill Klinger (C-NO President, 2014), wanting to talk more about SE and “future career paths.” Bill and JC had a lengthy chat on May 30, just as JC was starting a co-op period, at Swagelok Company, in Solon. Thereafter, JC joined INCOSE as a Student Member. He is now a B.S. Candidate in Systems and Control Engineering & Electrical Engineering.

On October 27, 2018, **JC** remarked:

INCOSE is a great experience and a good way for students to network and gain advice from members. I had the wonderful privilege of speaking with Bill Klinger on multiple occasions, who provided me with career advice and professional contacts. I think

INCOSE is a valuable organization for students to get involved with, both for professional and personal experience.

In late September, JC mentioned that his girlfriend, Christina (“Chrissy”) Gallishen—a CWRU B.S. Candidate in Electrical Engineering—is interested in potential EE positions at NASA Glenn Research Center. Katie Trase (C-NO President, 2017) promptly supplied a list of thirteen Co-Op Positions open at NASA GRC, for JC and Chrissy to review.

On October 27, 2018, **Chrissy** commented:

My boyfriend JC has spoken to Bill Klinger on a few occasions and always spoken very highly of him. I recently had the opportunity to speak with Bill about career and interview advice. It was a very helpful

experience and I learned a lot about the daily jobs of engineers. Having members of INCOSE speak with college students is very beneficial and greatly appreciated!

Bill Klinger

New Chapter Members

Since our last newsletter, we have had a number of new Chapter members. Welcome! The Board of Directors hopes the Chapter can aid you in your professional development, and looks forward to getting to know you.

May

- James Schmidt, a student at the Case Western Reserve University

June

- Larry Llewellyn, a student at the Air Force Institute of Technology.

July

- Jonathan Coyle, a student at Ohio State University
- Diana Centeno-Gomez, employed at NASA Glenn
- Julie Grantier, employed at NASA Glenn

August

- Brian Heston, employed at Zimmer Biomet
- Sri Harsha Maramraju, employed at General Electric

September

- Tim Holden, employed at Battelle Memorial Institute, Columbus, OH (beginning Dec 2017)

Here is some information provided by these members, so that we can get to know them better:



I am **James Schmidt**, a student at Case Western Reserve University. I chose systems engineering due to the flexibility of the discipline and the wide range of careers available. For example, I am currently on co-op at Swagelok, located in Solon, working as a manufacturing engineer. While I may not be in a specific systems engineering role at the moment, I am applying systems thinking and a systems approach to what could even implicitly be described as a systems role. Based on my experience thus far, I am confident that I will think as a systems engineer no matter the role I end up with in the future. I would like to thank the Cleveland chapter of INCOSE for a warm welcome, and I look

forward to meeting many of you.

Timothy Holden is an engineering professional with over 20 years (2018) experience in the aerospace and automotive R&D fields. Prior to joining Battelle, Mr. Holden served at Honeywell Aerospace developing revolutionary new product suites of LED light sources and power supplies nested in structural aircraft interfaces for all exterior aircraft lighting functions. New products were developed for military fighters, rotary wing aircraft as well as commercial transportation and business fixed wing aircraft. Initially responsibilities included lead mechanical engineering role, design and test, of electronics packaging and the structural interface to the aircraft under severe environments (vibration, thermal, salt fog, fluids, sand and dust, etc). Mr. Holden's responsibility grew to include the project engineering role working closely with program management and systems engineering. His final role was Technical Manager of the Production Support Engineering group, working closely to resolve issues with manufacturing, supply chain, and end users. In summary, Honeywell responsibilities ranged from the initial RFI/RFP technical proposal effort, new product development cycle, production launch, production and supplier quality and service related difficulties.



Prior to joining Honeywell, he spent the first 8 years of his career at Honda R&D, a culture immersed in RCCA. His focus was on new product development specializing in design, analysis and manufacturing methods of steel and aluminum space frame components including sheet metal stampings, tube forming, castings, forging and welding for all terrain vehicles in the Powersports Division. Other areas of focus included injection molded plastic components and tire development. New designs incorporated a balance of styling, performance, manufacturability, maintenance and market-leading reliability.

When not working, he enjoys serving God at his local church, raising his daughter, serving the local enduro race club (dirt bikes), and other outdoor recreation.

Dennis Rohn

Cleveland-Northern Ohio Chapter Membership Chair

Upcoming INCOSE Related Events

The list below provides a sampling of upcoming webinars and events that may be of interest to INCOSE members.

- November 8, 2018 – 2018 System Engineering Research Center Sponsor Research Review (Washington, DC)
 - <https://sercuarc.org/event/ssrr-2018/>
- December 12-14, 2018 – 23rd International Conference on Engineering Complex Systems (Melbourne, Australia)

- <http://formal-analysis.com/iceccs/2018/>
- December 14-16, 2018 – International Conference on Control Science and Systems Engineering (Wellington, New Zealand)
 - <http://www.iccsse.org/>
- January 26-29, 2019 – INCOSE International Workshop (Torrance, CA)
 - <https://www.incose.org/iw2019/home>
- February 7-10, 2019 – 2nd International Conference of Intelligent Human Systems Integration (IHSI 2019) (San Diego, CA)
 - <http://www.ihsint.org/>
- February 12, 2019 – Aerospace Corp. 2019 Systems Engineering Forum (El Segundo, CA)
 - <https://aerospace.org/events/systems-engineering-forum>

Dennis Rohn

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