

The NorthCoast Interfacer



2008

2009 - 2013

2014

President's Corner



I was fortunate to attend IS2015 this year, along with several other INCOSE Cleveland NO members. Here are a few highlights from that conference as we discussed during our July chapter meeting:

There were three international keynote speakers, discussing how Systems Thinking was used to operate highly complex systems:

UC Davis – Chancellor Linda Katehi described how Systems Thinking and Complexity Science have been used since 2009 to transform their billion-dollar university system from “teacher-centric” to “student-centric”. The advanced modeling tools employed covered the Social, Organizational, and Physical frameworks found in the university.

Dr Jan Bosch is a renowned software engineer, with a history of working internationally on complex software systems, including Nokia phone networks and automobile networks. Currently, he teaches at Chalmers University. He observed the following transitions taking place in modern complex systems:

From:

- Systems Built to Last
- Opinion-based decision making
- Deeply integrated architectures
- Hierarchical organizations
- Satisfying requirements
- Static Certification

To:

- Systems Build to Evolve
- Data-driven decision making
- Modularized architectures
- Ecosystem of partners
- Constant experimentation and innovation
- Dynamic, continuous certification

Dr. Ron MacKenzie is the lead systems engineer for the South Africa Water Management system. Dr MacKenzie discussed the complexity involved in developing and executing the model of the entire grid of water distribution, including lakes, reservoirs, and all piping/pumps. Complex systems models are employed that need to have very long range

weather forecasting based on historical rain patterns. Once again, the complexity is driving up the need for modelling.

The number of cybersecurity-related papers and presentations has dramatically climbed in recent years at this Systems Engineering conference. It was fascinating to see the future direction the DoD and DHS are headed with advanced Cybersecurity architectures and monitoring capabilities. More infrastructures are jumping on board as they apply advanced systems engineering to their unique problems.

There were also some interesting tracks on the Philosophy of Systems Engineering and considerable work in the Biomedical and Health Care industries.

Several researchers are trying to develop a formal philosophy for Systems Engineering in order to make it an accepted discipline. If interested, here is a group chartering a manifesto for this effort: <http://systemology.org/manifesto.html> (see attached flyer.)

If would like to learn more about the conference or the speakers, please feel free to contact me at carl.dister@rfirst.org

Sincerely,
Carl Dister
C-NO President (2015)



Figure 1 IS2015 Banquet at The Museum of Flight (Yes we are dining under an SR-71 Blackbird)



Figure 2 IS2015 Banquet at The Museum of Flight



Figure 3 On Friday a tour of the Boeing facility in Everett was provided to a limited number of IS2015 participants.

New Chapter Members

We welcome four new members to the Chapter since the beginning of July: Brittany Schaefer, Derrick Cheston, Shane Mays, and Bob Sherman. The Board of Directors looks forward to meeting you, at future Chapter meetings or events.

Here some information about Derrick Cheston so that you can get to know him: Derrick Cheston is a senior executive at the NASA John H. Glenn Research Center in Cleveland, Ohio and is responsible for leading the Systems Engineering and Architecture Division within the Research and Engineering Directorate. Derrick began working at the Center after graduating

from North Carolina State University with a B.S. in Aerospace Engineering and has spent over 30 years within research and engineering development organizations in a variety of functions and positions of leadership. He began his career as an engineer and manager in the structural and thermal design and analysis arena for aeronautics and space projects. He was a NASA liaison to the Ohio Aerospace Institute, and also spent five years assigned to the NASA Engineering and Safety Center where he implemented agency functions to influence a new agency technical authority and excellence culture in the aftermath of the Columbia tragedy. He served as Chief of the Mechanical and Fluid Systems Division, before taking on his current role. In addition, he has earned both a MS in Mechanical Engineering and an MBA from Cleveland State University.

In the last newsletter, we welcomed Michael Hollopeter. Here is a little more information about him: His background is electrical engineering, and he has been working in the aerospace industry for 10 years. He recently transitioned back to Ohio from California and is working for STERIS in Mentor OH engineering surgical medical devices. To learn more about him, you can visit his Linked-In profile: <https://www.linkedin.com/pub/michael-hollopeter/30/b42/3b0>.

Dennis Rohn
Cleveland-Northern Ohio Chapter Membership Chair

Great Lakes Regional Conference 2015

Don't forget that our chapter is hosting the Great Lakes Regional Conference next October. Visit the [INCOSE GLRC9 Page](#) for more information.



Energy Tech 2015

Thank you all for your support in spreading the word about EnergyTech2015. As we finalize and formalize event details and new partnerships, you'll find an excellent roster of confirmed and invited speakers already posted on our event website www.energytech2015.com, and an agenda you can begin to plan your attendance around. Positive feedback and engagement all point to a sell out event, so we encourage you to [get your tickets early](#).

Special note: in addition to Stewart Cedres from the US Department of Energy Office of Electricity Delivery + Energy Reliability, and David Long, Founder and President of Vitech Corp, we welcome Brannan Kelley, CIO at American Municipal Utilities, and Boston University Professor Virginia Greiman as Keynote Speakers for EnergyTech2015. See their bios at the top of our [presenters page](#).

We encourage you to continue sharing this info to your network, membership, or interested contact. Also, we welcome you to follow us on Twitter, our primary social media channel [@EnergyTechCle](#)

For those of you traveling or inviting guests from out of town, we are partnering with the Wyndham hotel, and will soon be distributing the EnergyTech discount code to receive our room block rate of \$119 per night.

Best regards,

John Juhasz, Conference Chair

info@energytech2015.com

Chapter Elections Are Coming

The return to school signals many things. One of those things is that it is almost election time for the Cleveland Northern-Ohio Chapter. Per our Bylaws, we will be electing a new Board of Directors for the 2016 year, in October.

The current Board of Directors is in the process of establishing an independent Nominations and Election Committee. If anyone is interested on serving on this Committee, please contact Carl Dister, Chapter President, as soon as possible.

Three positions are voted on each year: Vice President, Secretary, and Treasurer. A strong Chapter requires active participation by its members. Serving on the Board in an elected position is one way that you can help the Chapter. It also can help to build your leadership skills. Please consider becoming a candidate for one of these positions.

The Nominations and Election Committee will be seeking individuals to be candidates, once it is established. Until then, if you are interested in being a candidate, please let Carl Dister know.

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2015 Chapter Officers:

President:

Carl J. Dister

Vice-President:

Marian Cronin

Secretary:

Katie Trase

Treasurer:

Ernest Ansu-Gyeabour