



The NorthCoast Interfacer

President's Corner



There is a saying that goes “April showers, bring May flowers.” We have already had our share of rain this month, so hopefully we will have a lot of May flowers, as long as the deer don’t eat them. And hopefully the clouds will clear on May 8th, and we will be able to see the solar eclipse (with appropriate eye protection).

In the last newsletter, I mentioned the Chapter leadership’s focus on promoting systems, science, technology, engineering, arts, and mathematics (SySTEAM) to students. In this issue, you will see two more examples, one recently completed and one opportunity coming up. We encourage all of you to consider participating in such SySTEAM outreach.

The Board has a lot of things we are working on. One of those is making investments to try to improve our ability to conduct hybrid chapter meetings. We hope to hold most chapter meetings in a hybrid fashion, on the second Monday of every month, so if you can, reserve that time to attend. Most will be in the evening, but we might throw in a noon-time all-virtual event, or add other special events. I am looking forward to our series of Chapter meetings, as they will be opportunities to learn and share.

I challenge each of you to stay curious and participate in our chapter meetings, events and activities, invite colleagues to attend with you, and encourage them to join INCOSE.

As usual, if you have any suggestions for chapter meeting topics, event, or activities, feel free to reach out to us.

- Dennis Rohn
2024 C-NO Chapter President

April Chapter Meeting – C-NO Café #1

Join us for the April 2024 INCOSE Cleveland-Northern Ohio (C-NO) Chapter Meeting, on April 10, 2024, starting at 6:00 pm. This month's meeting will be held as a hybrid meeting with in-person attendance at the Cuyahoga County Library - North Olmsted Branch, in the basement Meeting Room. Join us for a great opportunity to network with fellow systems engineering enthusiasts and learn from one another. We plan to begin our series of discussions related to systems engineering processes.

We will be utilizing an approach, which will be referred to as C-NO Cafés, with some prepared questions to stimulate discussion on a chosen topic, followed by general sharing of knowledge and an opportunity to ask questions. This month's topic will be centered around the role of systems engineers, systems engineering, systems engineering life-cycles, unknown-unknowns, and complexity.

Don't miss out on this chance to expand your knowledge, share your experiences, and ask questions of like-minded professionals.

For those attending virtually, connection information for a Microsoft Teams meeting will be sent via email after registration. Registration is through Eventbrite at:

<https://www.eventbrite.com/e/incose-cleveland-northern-ohio-chapter-april-meeting-tickets-866797744387>

We look forward to seeing you there.

We would like to grow attendance at our meetings. Most meetings are free and open to anyone with an interest in systems engineering. Consider inviting a colleague to join you and pass meeting information along to anyone else in your organization who may be interested. Typically, there will be a flyer posted on our webpage with the meeting information. Feel free to download it and post it near your office.

Future chapter meetings are planned for the second Monday of every month, unless there is some conflict, like this month's, with the eclipse. The May meeting will be Monday, May 13, 2024.

Girls Take Flight – April 13, 2024

Girls Take Flight is the annual science, technology, engineering, and math (STEM) education event for Brownies and Junior Girl Scouts (1st through 5th grade). It is held at Case Western Reserve University (CWRU) each year as a result of a partnership between CWRU, NASA Glenn Research Center (GRC), and the Girl Scouts of North East Ohio (GSNEO) that began in 2009.

Each year, volunteers from NASA GRC, CWRU, and local engineering, education, and aviation organizations serve between 75 and 250 Girl Scouts with hands-on projects, experiments, and demonstrations to inspire a love of science and engineering.



A volunteer from NASA GRC assists Girl Scouts who are constructing towers and space-faring vehicles.

This year, the Cleveland-Northern Ohio Chapter Board of Directors has decided to make this event part of our Systems, Science, Technology, Engineering, Arts, and Math (SySTEAM) outreach and are soliciting volunteers from the chapter. Several leaders plan to volunteer at the event.

Girls Take Flight will be held on Saturday, April 13th, 1-4 PM, where set-up will start at ~10 AM and tear down will take place immediately after the event. Volunteers don't need to come at 10 AM but are encouraged to be on site by at least 11:30.

If interested in volunteering, please contact Amber Waid at amber.waid@incose.buzz by noon on April 12th.

Chapter Participation at FIRST Robotics Buckeye Regional Competition – March 22-23, 2024

The Chapter supported the FIRST Robotics Buckeye Regional Competition March 22-23 held at the Cleveland State University Wolstein Center. Two members, Joel Knapp and Cody Farinacci, participated as judges of the competition.

“Combining the excitement of sport with the rigors of science and technology. FIRST Robotics Competition is the ultimate Sport for the Mind. High-school student participants call it ‘the hardest fun you’ll ever have.’ Under strict rules, limited time and resources, teams of students are challenged to raise funds, design a team "brand," hone teamwork skills, and build and program industrial-size robots to play a difficult field game against like-minded competitors. It’s as close to real-world engineering as a student can get. Volunteer professional mentors lend their time and talents to guide each team.”

Judges assessed each team’s robot for Innovation in Control, Industrial Design, Excellence in Engineering, Creativity, Autonomous Operations, and Quality. Awards were also given out to teams based on team attributes: Engineering Inspiration, Gracious Professionalism, Imagery, Team Spirit, Rookie All-Star, and Rookie Inspiration. It was a fun and fulfilling event seeing all the creativity and ingenuity these high school students put into their robots. If anyone would like to join us in judging next year, contact Joel Knapp or Cody Farinacci for details.



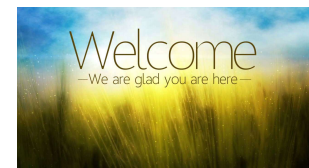
Welcome to New Chapter Members

Welcome to new Chapter members since our last Newsletter! The Board of Directors hopes the Chapter can aid you in your professional development and looks forward to getting to know you.

- Andrew Skrzypek

To all members, I would encourage you to invite co-workers and other systems engineers you know to join INCOSE and become active in the Chapter.

- Dennis Rohn
Cleveland-Northern Ohio Chapter Membership Chair



INCOSE 2024 International Symposium



The INCOSE symposium has a rich history that dates back to 1991, and has continued uninterrupted every year to the present. INCOSE's Annual International Symposium is the largest worldwide annual gathering of people who do systems engineering. The program attracts an international mix of professionals at all levels, and includes practitioners in government and industry, as well as educators and researchers. The benefits of attending the Symposium include the opportunity to share ideas, network, build competency, pursue certification, contribute to the advancement of the profession through collaboration on tools, processes and methodologies, learn about new offerings in training and education, and forge new partnerships.

The 2024 International Symposium will be held July 2 to 6, 2024 in Dublin, Ireland. A full and exciting program is planned for the first four days, followed by a day of tutorials. It is not too early to start making plans to attend. Register before May 19, to save on registration fees. If you can't make it to Dublin, a virtual option is also available.

The INCOSE Systems Engineering Journal



One of the INCOSE member benefits, is the opportunity to read articles in the INCOSE Systems Engineering Journal. It is an international scholarly journal and a primary source of multidisciplinary information for the systems engineering and management of products and services, and processes of all types. The issues can be accessed via: https://www.incose.org/2023_redesign/publications/se-journal.

The following articles can be found in the March 2024 issue.

- REGULAR ARTICLES
 - A methodology for parameter estimation in system dynamics models using artificial intelligence
 - System of systems engineering governance framework for digital transformation: A case study of an Australian large government agency
 - Defense program quality-cost-delay optimization: architecture framework, a bridge between program management and system engineering
 - Model-based standards authoring: ISO 15288 as a case in point
 - A taxonomy of metrics for human representations in digital engineering
 - Application of soft systems methodology to frame the challenges of integrating autonomous trains within a legacy rail operating environment
 - Garment production line optimization using production information based on real-time power monitoring data
 - Knowledge elicitation methodology for evaluation of Internet of Things privacy characteristics in smart cities

- A methodology for developing SoS architectures using SysML model federation
- Refining autonomous vehicle situational awareness due to varying sensor error
- Government-enterprise collusion and public oversight in the green transformation of resource-based enterprises: A principal-agent perspective
- Implementation guide for process safety management
- COMMUNICATION
 - Systems engineering and water resources management: A closer relationship is needed

Volunteer Opportunities

In the last newsletter, we mentioned that there are opportunities for individuals to get involved with the Chapter. Some of those opportunities can be one-time efforts, or on-going small efforts. Some examples include: coordinating a chapter meeting location, coordinating food for a chapter meeting, preparing this newsletter, writing an article for this newsletter, leading a discussion at a chapter meeting. There are many more. The Board would welcome anyone interested in giving a hand. Contact us if interested. As the idiom goes, many hands make light work.



Welcome Center Cafes



Do you ever wish you knew a little bit more about INCOSE? Whether you are a new member or have been a member for several years, you might want to check out the New Member Welcome Center Cafes. This is a program with a new featured topic each month to introduce our new members to various communities, initiatives, and individuals that make INCOSE thrive.

Details can be found at: <https://www.incose.org/engage-with-incose/new-member-welcome-center>. If you want to see past cafes, they can be found in the New Member Welcome Center Cafe Archive (<https://www.incose.org/engage-with-incose/new-member-welcome-center/new-member-welcome-cafe-archive>).

Like us on Facebook

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