



NORTH STAR  
Systems Engineering

# The Integrator

## North Star Chapter of INCOSE Newsletter

Volume 16, Issue 2

Second Quarter 2019

### Chapter News

#### ***The President's Corner...***

Greetings members and friends of the North Star Chapter!

As we head into the summer, we continue to build on the momentum that we established in the Spring. In spite of Mother Nature's attempts to thwart our meetings this year, we were able to reschedule our April meeting and held a very successful meeting. Minnesota State University graciously hosted the meeting with Neill Radke facilitating a lively presentation and discussion on "The Role of a Systems Engineer". The consensus from all perspectives was to have more discussions on this subject in the future.

We kicked-off May with the 5<sup>th</sup> Annual Health Care Working Group Conference. Each year this conference continues to grow and improve, and 2019 was no exception. Attendance was up by 30% over last year, drawing in presenters and attendees from all over the country, and industries out-side of health care. The keynote presentation and topics that covered Agile, modeling, MBSE, and soft-skills were applicable engineers of all disciplines. For people local to the Minneapolis/St. Paul Area, this conference is a "must attend" for 2020, even for those not in the health-care industry.

For the May Chapter meeting, we brought in Julie Nelson to present on "The System Approach to Manufacturing Customized Structures." Julie was captivated the audience for the full presentation illustrating the concept of "Systems Thinking" and the application of modeling, from the perspective of someone that is not a "Systems Engineer". Her presentation was a poignant lesson in the parts of Systems Engineering that not about \*all\* of the details, but more importantly the critical details that affect the nature of the system.

For June, we take the month off from our regiment of monthly presentations, and instead focus on social aspects of our work. This year's Summer Social Event is a tour at "Wings of the North Air Museum" at the Flying Cloud Airport, followed by dinner at the nearby Wildfire restaurant. The plan is for the Chapter to present some awards to recognize the contributions of some outstanding individuals.

In closing, I would like to update you on some of the special initiatives that we kicked off this year. First, the Chapter now possesses some quality PA equipment. The Chapter rented the equipment to the Health Care Working Group conference that used it for the keynote presentation room. We received many compliments on the quality of the sound. We are planning to pilot a remote-streamed meeting for July, so stay tuned to more capabilities that we can now leverage.

Second, The "Brown Bag" program is having mixed results. We have several senior-level systems engineers that have offered to give presentations on a variety of subjects. To date, we have not had an organization request a "Brown Bag" session. I am hoping to see everyone help make two or three happen over the summer.

Remember, the North Star Chapter is your chapter. If you have a request, a suggestion, or would like to become more involved, contact me, or any Chapter officer.

*Sean McCoy*

*2019 President, INCOSE North Star Chapter*

[sean.mccoy.csep@gmail.com](mailto:sean.mccoy.csep@gmail.com)

# *Welcome New Chapter Members!*

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization founded in 1990 to develop and spread the interdisciplinary principles and practices that enable successful systems. We have grown to more than 17,000 members meeting in over 70 local chapters in over 35 countries which translates to boundless opportunities to network, learn and have fun.

As members we represent a broad spectrum – from student to senior practitioner, from technical engineer to program and corporate management, from science and engineering to business development. We work together to advance our technical knowledge, exchange ideas with colleagues, and collaborate to advance systems engineering. There are many exciting challenges ahead and we are glad you are joining us!

**ALLAN NARVESON**, Principal Electrical Systems Engineer at Ingersoll Rand.

**BRIAN DAVENPORT**, Systems Engineer at General Dynamics Mission Systems.

**MICHAEL BARTON**, R&D Manager, Systems Engineering at Boston Scientific.

**CHRISTOPHER KENYON**, Systems Engineer at Northrop Grumman Corporation.

**DACIA CAVALARI**, Software Engineer at General Dynamics Mission Systems. Dacia graduated in May 2017 with a BS in Computer Science. Dacia is interested in learning new skills and growing her software development knowledge. Find, [Dacia Cavalari](#) on LinkedIn.

**DAVID QUIMBY**, Principal Systems Engineering at Innovation Radiation. David has quite the wanderlust who is out for geographic adventure and discovery, He's climbed Mt. Whitney; he's done trekking in Thailand, photographic safari in Kenya, sea kayaking in Alaska; and David has traversed the U.S. and Canada by motorcycle. He has also traveled extensively in Europe, South America, and Australia. David hopes to explore Antarctica someday; he'll see about low earth orbit. Find, [David Quimby](#) on LinkedIn.

**DIANE MOUKOURI**, Configuration Data Analyst at BAE Systems, Inc. Diane is a R&D leader with extensive systems design and global team leadership experience, bringing technology ideas from concept to product. Find, [Diane Moukouri](#) on LinkedIn.

**ERIC ANDREWS**, Director of Engineering, Hardware at Monteris Medical. Eric's goal is to build relationships with a dynamic group of people that strive for pushing the boundaries in developing biomedical technologies. Find, [Eric Andrews](#) on LinkedIn.

**GRAHAM SPALL**, Principal System Engineer at Atricure Inc. Graham is well organized and a motivated Engineer with expertise in Medical Device Development, Radio Regulatory preparation and submission, Requirements Management, Human Factors Studies, Project Management, Six Sigma (DMAIC) process and Risk Management tools such as Fault Trees and FMEAs. Find, [Graham Spall](#) on LinkedIn.

**HAMID SAFDARI**, Systems Engineer at General Dynamics Mission Systems. Find, [Hamid Safdari](#) on LinkedIn.

**JOHN STATON**, Senior Java Developer at General Dynamics Mission Systems. Independent, adaptive software engineer with 7+ years of experience in award winning, top level research and development, on-site integration, & customer requirement drafting with expertise in HMI/GUIs and Artificial Intelligence Find, [John Staton](#) LinkedIn.

**MARK WALDOF**, Owner and Principle Consultant at Mark Waldof Consulting. Mark Waldof has 44 years of industry experience in systems engineering, project management, system design, electrical design, software development, systems integration and test, marketing and proposals, legal support and management infrastructure developments. Find, [Mark Waldof](#) LinkedIn.

**MARY SCHUEPPERT**, Product Line Engineer II at Smiths Medical. Find, [Mary Schueppert](#) LinkedIn.

**PHILLIP RICKERT**, Platform Architect at Trane/Ingersoll Rand. Find, [Phillip Rickert](#) LinkedIn.

**SCOTT ROSSOW**, System Engineer at John Deere.

**TORA HUSAR**, is an enigma.

**WESLEY NELSON**, is an enigma at Ecolab Inc.

---

## ***Where We Have Been...***

### ***April 25th Meeting: Systems Engineering - The Role of the Systems Engineer***

The Systems Engineer plays an integral role within the organization and on the project to which he/she is assigned. While specific roles differ from company to company, when assigned to a project, the systems engineer is best characterized as the Technical Lead for the project. As such he/she owns the system requirements and technical holder needs and expectations.

Our Presenter was Neill B Radke. Mr. Radke is President and Chief Solutions Architect with Radke Strategic Solutions, LCC. He is a Systems Engineering Leader who excels in product development, process improvement, teaching, and mentoring. He has worked with companies to develop products and systems using proven systems engineering and project management methodologies.

### ***May 9th Meeting: The Systems Approach to Manufacturing Customized Structures***

#### **The Systems Approach to Manufacturing Customized Structures Specifically Commercial Building Interiors**

Our speaker, Julie Nelson, earned her degree in Commercial Interior Architecture some 30 years ago and has spent the ensuing time in and around the design and construction field. From facilities management at Medtronic to workplace design with Herman Miller to prefabricated construction at Timco Construction; the process of building better has always been her calling. Currently, Julie is the Vice President of Adaptt, a Minnesota based distribution partner for DIRTT Environmental Solutions.

DIRTT (Doing it Right This Time) uses its proprietary 3D software and manufacturing equipment to create prefabricated interiors; each space tailored to the client's needs. Prefabricated interiors change the linear construction process as we know it. Building with a prefab solution affects the efficiencies of all trades on a construction project by acting as a 'super sub', forcing the detailed discussion of process, planning and complete requirements early on to clarify roles, pricing, schedule and productive onsite labor. Julie will give us a good look at how DIRTT has successfully applied this systems process in several most interesting cases.

### ***June 15th Meeting: Summer Social; Wings of the North Air Museum***



John Palmer put together another excellent summer social event. About 2 dozen people started their evening at "Wings of the North Air Museum" at the Flying Cloud Airport. Volunteers provided a history of the aircraft in the museum, all of which had direct connections to Minnesota. A self-guided tour of the museum followed the presentation. The museum had had several of the historical aircraft from their collection on display along with other items associated with the people from Minnesota connected to the aircraft, including cars, flight suits, radio equipment, and much more.

The group then had dinner at the Wildfire restaurant in Eden Prairie. The food, service, and conversation were all 5-stars and the festivities continued for over 2 hours. At the dinner, the Chapter President presented Chapter awards to acknowledge the contributions of three members:

Roz Dolid – Key Contributor Award

Angela Robinson – Key Contributor Award, accepted in her absence

Michele Zoromski – Outstanding Contributor Award, accepted in her absence

It was a fun event and evening for everyone able to attend. We are looking forward to the next social event in December.

*Sean McCoy*

*2019 President, INCOSE North Star Chapter*

**Volume 16, Issue 2; Quarter 2, 2019**

---

---

## ***INCOSE Publications: Keeping up with Technology...***

### ***INSIGHT is the magazine of International Council on Systems Engineering***

It is published four times per year. In 1993, INSIGHT was a newsletter and contained reports by the various groups, chapters, BOD. As the organization grew, and we had more substantive things to say INSIGHT changed to feature theme sections dedicated to providing informative articles on the state of the art and practice in systems engineering. It also contains status and information about INCOSE's technical work programs, and events, editorials, book reviews, trends, and how-to-do articles that are pertinent to the many aspects of a systems engineer's job.

INSIGHT is now a Practitioners' Magazine published by Wiley and can be found in Wiley Online Library and in Connect. **You must be logged in through the [INCOSE Member Login](#) in order to gain access to these Member Only Areas: [Wiley Online Library](#) or [INCOSE Connect](#).**

The Archive of INSIGHTs from 1993 through 2014 is available to members only at [INCOSE Connect](#), Library.

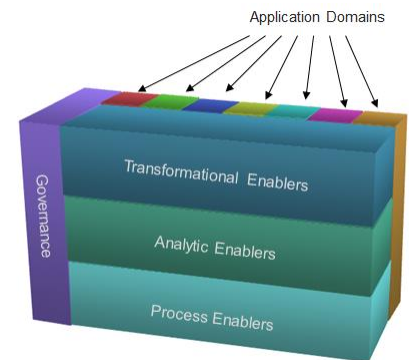
---

## ***Keep your skill set current and keep up with best practices by joining a Working Group TODAY!***

INCOSE working groups are a great place to meet individuals who are looking to overcome similar challenges. These groups often span multiple regions and industries, so we can really look at these topics in a broad, informed way. In the North Star Chapter, we have several members Chair/working in different groups like the Measurement, SE in Very Small Enterprises (VSE), Handbook as well as others. There are many topics to choose from. Finding the groups and joining is easy! To join any working group:

1. Login to your account at [INCOSE.ORG](#)
2. Click on the "Profile Home" link under your login at the top of the page.
3. Scroll down to **My Committees/Working Groups** on the lower left-hand side of the page and click on the link **Browse / Join a Working Group**
4. This will result in a list of Working Groups under the header Committees. (The terms are interchangeable)
5. Scroll down until you see find a committee that you are interested in. Click the link and then on the right click on the (view) link.
6. This will result in a roster of current WG members.
7. Scroll down to the bottom of the list and under "Committee Tasks" click on "Join this Committee"

Working groups are a great way to learn more about a subject, grow your network, and share your knowledge about a subject.



Learn more about what we can do. Click here for the [Q2 2019 INCOSE Members Newsletter](#)

Join INCOSE on the Official 

Join INCOSE on the Official 

Follow us on 

Follow INCOSE on

 YouTube