



NORTH STAR
Systems Engineering

The Integrator

North Star Chapter of INCOSE Newsletter

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First Quarter 2019

Chapter News

The President's Corner...

Greetings Members and Colleagues of the North Star Chapter!

I am honored to be serving as the Chapter President for 2019, and I am grateful for the support of our Elected Officers, Appointed Directors, Past Presidents, and membership. The dedication of everyone involved helps make the North Star Chapter vibrant and an example for other chapters of INCOSE.

The year is off to a good start with three solid chapter meetings and the spring tutorial already behind us. Also, the local Cyber Security working group has met and continues to make progress. We have two major themes for 2019 - practical application of systems engineering and soft-skills development for engineers. Look forward to more meetings this year on these subjects that provide some practical ideas ready to apply the next day.

Thank you to everyone that attended the spring tutorial; and thank you to Michele and Dan for arranging the presenter and the venue. The material was engaging, was easy to understand, and readily applicable to many facets of Systems Engineering. I found that the non-competitive negotiation technique (called Integrative Negotiation) that focuses on maximizing benefits of both parties to be especially poignant and applicable to a Systems Engineer that negotiates scope, resources, priorities, funding, etc.

We have some new things to look forward to in 2019. First, the Chapter is investing in Audio-Visual equipment to support live streaming of our Chapter meetings. The larger Chapters host their meetings in this way and provide remote participation for members. This is especially important for Chapters in cities with long commutes, like LA. I am still working out the kinks, and I am hoping to have this ready by summer.

Second, we are piloting a "Brown Bag Program" this year. With this program, you can have an experienced Systems Engineer spend an hour or two to discuss a topic of your choice, or maybe to just share their experience with you and your team. It could be any Systems Engineering related topic, INCOSE, certifications, working groups, MBSE, Agile, Soft-Skills, new technology, etc.

How this works: You put in a request to the Chapter leadership for a brown bag session and topic. The Chapter leadership will select from the list of volunteers available the most experienced Systems Engineer with knowledge in the requested topic. You arrange the date and time with that System Engineer and your organization hosts the meeting. These meetings are expected to last an hour or two, and can be early morning, over lunch, late in the day, or in the evening. Due to the restrictions that some organizations have about providing meals, or accepting meals, there are no requirements to provide meals. The hosting may choose to provide, or not to provide, a meal at their own discretion and/or company policy.

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, North Star Chapter of INCOSE

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

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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!

KEHINDE ADEMONEHIN, Engineering Manager at Medtronic, Inc.

SEGUN ADEMONEHIN, Advanced Quality Engineer at General Dynamics Mission Systems. Segun, is an engineering professional with years of proven experience in the defense, aerospace and telecommunications industries. He currently works at General Dynamics. He previously worked as a product manufacturing engineer at Honeywell and as a managed services engineer at Ericsson.

His international experience (career and education) spans three countries in three continents. His professional interests are in quality & reliability engineering, research & development, manufacturing engineering, and project & program management. Find [Segun Ademonehin, PMP, ASQ CQE, ASEP](#) on LinkedIn.

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

CALVIN DERLETH, Systems Engineer at Medtronic. Cal is an engineering professional with a passion for analyzing information and devising creative solutions for complex problems. A lifelong learner who likes to be challenged and consistently grow new skills; Excels at learning concepts from many different technical disciplines and working in very diverse groups. Adept at working individually as well as in highly cross functional local and international teams. Find [Cal Derleth](#) on LinkedIn.

GLENN GASMEN, Engineering Leader at Trane. Glenn is adding value through innovation and product cybersecurity and is a product security and product development professional with a passion for the high tech sector, both as an entrepreneur and an executive. Accomplished in business development, strategic planning, P&L management, project management, product development, customer support, employee engagement and professional services. Enjoyed success in executive management, technology leadership, and product development roles in conjunction with recruiting, building and managing strong, highly productive global teams. Find, [Glenn Gasmen](#) on LinkedIn.

JOE HALFEN, Sr. Manager Systems Engineering at Abbott. Find, [Joseph Halfen](#) on LinkedIn.

MARK LIMKEMAN, Laboratory Manager at 3M. Mark is a R&D leader with extensive systems design and global team leadership experience, bringing technology ideas from concept to product. Find, [Mark Limkeman](#) on LinkedIn.

ANKUSH MODI, Systems Engineer at Nonin Medical Inc. Ankush has nine (9) Years of experience in the medical device industry. He has leadership experience in global project management, product engineering, process validation, manufacturing, and continuation engineering. He is also experienced in launching global design improvements and software/hardware upgrades as well as being skilled in leading root cause investigations and solution implementation. Find, [Ankush Modi](#) on LinkedIn.

MELISSA RHODES, Principal Systems Engineer at Medtronic, Inc. Find, [Melissa Rhodes](#) on LinkedIn.

SEAN BURKE, Technical Manager at 3M. Find, [Sean Burke](#) on LinkedIn.

From the Director of Academia and Outreach

Another productive quarter was had to start 2019 in Academia and Outreach. The chapter was introduced to a new STEM partner and spent an evening with the students of the Farnsworth Aerospace School PK-8 age groups for their biennial Engineering Fair. The students spend the evening mingling with volunteers from engineering companies and organizations learning what engineers do across different industries and backgrounds. INCOSE attended to teach

students about systems engineering and the importance of understanding how the engineering disciplines must work together to achieve complex projects. Kudos to Director of Industry, Venkat Parameshwara, for making the connection.

Where We Have Been...

January 10th Meeting: Top 10 Ways to Engineering Success-- The Importance of Soft-skills

This presentation was given by our NSC President and explored areas that engineers commonly struggle with in their career development and effectiveness. The recurring feedback comment “you need to work on your people skills” has become cliché for many engineers, and while often accurate the statement is also not a very helpful comment for an engineer. We explored some examples of common problem areas for engineers in a humorous “Top Ten List” format; and then were offered some constructive recommendations for how engineers can avoid these clichés in their career development.

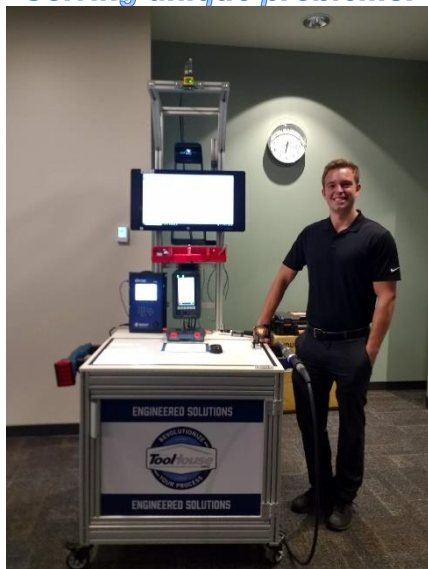


In the category of “soft skills”, this information is generally applicable to anyone interested in improving their effectiveness on project teams – as team member, a team leader, or a manager of engineers.

February 10th Meeting: Augmented Reality by Tool House

Do you see Augmented Reality in your future? This was an attention-grabbing presentation and demonstration of the Tool House’s Light Guided System (LGS). LGS is a projector based Augmented Reality (AR) system solution. LGS’s usages cover a wide range of industries and applications. Some of the specific applications LGS has been applied to are: operator guidance, operator verification, machine vision, enabling/disabling external devices, integrating dynamic work instructions and animations. LGS is often utilized for operator training. LGS has also been configured to assure no fault forward assembly and kitting. The presentation will include a working example of LGS including integration of external devices to demonstrate some of the system’s capabilities.

Solving unique problems!



The presenters had fun!



NSC members embracing new technology!



The attendees had lots of fun!



March 7th Meeting: Building Commissioning

Have you ever heard of Building Commissioning? We had a terrific look into what it takes to complete a Building Commissioning and why you should care! We were honored to have Rebecca Ellis, PE, a nationally recognized leader in the building commissioning industry as our meeting presenter. Ms. Ellis opened our eyes to an area of Systems Engineering that a number of us do not have much experience in, Building Commissioning.

Most commissioning professionals use some type of tabular list to document and track resolution of deficiencies with, questions about, and/or differing opinions regarding building systems operation. The list is often called the commissioning action list (CAL). The primary goal of design and construction phase commissioning planning and preparation is to minimize the number of items that end up on the CAL as a result of acceptance phase functional performance testing.

Ms. Ellis shared with us some of the most common building systems deficiencies on the CAL and typical methodologies used to resolve these deficiencies.

March 25th Meeting: SWE & NSC Joint Networking Meeting

The North Star Chapter (NSC) of the International Council on Systems Engineering (INCOSE) met with the Society of Women Engineers (SWE). The NSC will provide several short presentations on experiences as a Systems Engineer and how it relates to the engineering society, INCOSE. The NSC also presented information about the INCOSE initiative, Empowering Women as Leaders in Systems Engineering (**EWLSE**) which has the vision, "... to live in a world where men and women are equally represented as leaders in systems engineering."

INCOSE Webinars: Keeping up with Technology

There is a treasure trove of information in the form of webinars on the [Webinars](#) page of the Connect Site.

The International Council on Systems Engineering proudly offers its free weekly and monthly web-based service to the greater Systems Engineering community.

Once a week, the INCOSE Technical Operations Training Working Group presents the INCOSE Systems Engineering Handbook V4.0 Tutorial series over a six month period beginning in October. Once a month, INCOSE Technical Operations presents recognized experts in the field who discuss the "State of the Art" in Systems Engineering.

These presentations occur live, via the internet. Each last one hour and includes the opportunity for attendees to submit questions to the presenter. We record the webinars and INCOSE members can access these recordings from the Member's Only pages of INCOSE Connect.

You can access the INCOSE Connect Site for a complete library of [Webinars](#) sponsored by INCOSE Tech Ops, Chapters and Working Groups. The materials presented here are the professional opinions of the authors and do not necessarily reflect the opinion of INCOSE. Use of these presentations are limited by the author's copyright. Contact information for the authors is usually found in the presentation or video.

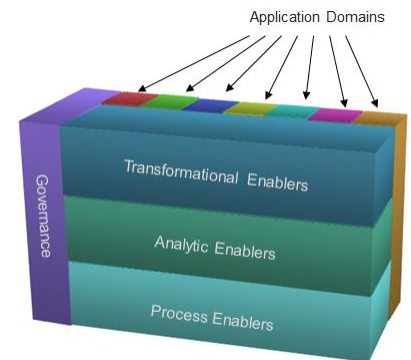
Webinars Qualify for PDUs

INCOSE Certified Systems Engineering Professionals can claim 1PDU credit towards their re-certification by attending a webinar or watching a webinar recording. To qualify, a CSEP must have attended through at least 75% of the webinar for webinars that last less than one hour, or through 45 minutes of the webinar for webinars that last for 1 hour or longer. Attendees of INCOSE webinars who have other professional certifications or licenses may find that these webinars can apply to the PDU requirements for re-certification or license renewal.

All times listed are UTC. Please convert the time to your own time zone to determine when it will be presented in your local time. Please be careful to account for daylight savings time.

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 for the [Q4 2018 INCOSE Members Newsletter](#)*

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