



CHICAGOLAND



INCOSE Chicagoland Chapter Meeting Agenda

April 21, 2022

Please MUTE your phone



Agenda

- **6:30 – 7:00 PM CT** – Welcome and Announcements
- **7:00 – 9:00 PM CT** – Guest Speaker



Get to Know Your Fellow Chicagoland SEs

Would you like to participate in a short poll?



CHICAGOLAND



MEMBERSHIP



3 Renewing Members

Thank You for renewing your membership!

Name

Andrew Hussli

Malathi Narnur

Mike Gut



Benefits of INCOSE Membership

Professional Development

1. **Monthly speakers at Chapter Meetings** on topics relevant to System Engineering (later in this meeting)
2. **Monthly Webinars** on topics relevant to System Engineering (hosted by INCOSE Central).

incose.org/about-incose/community/webinar-showcase

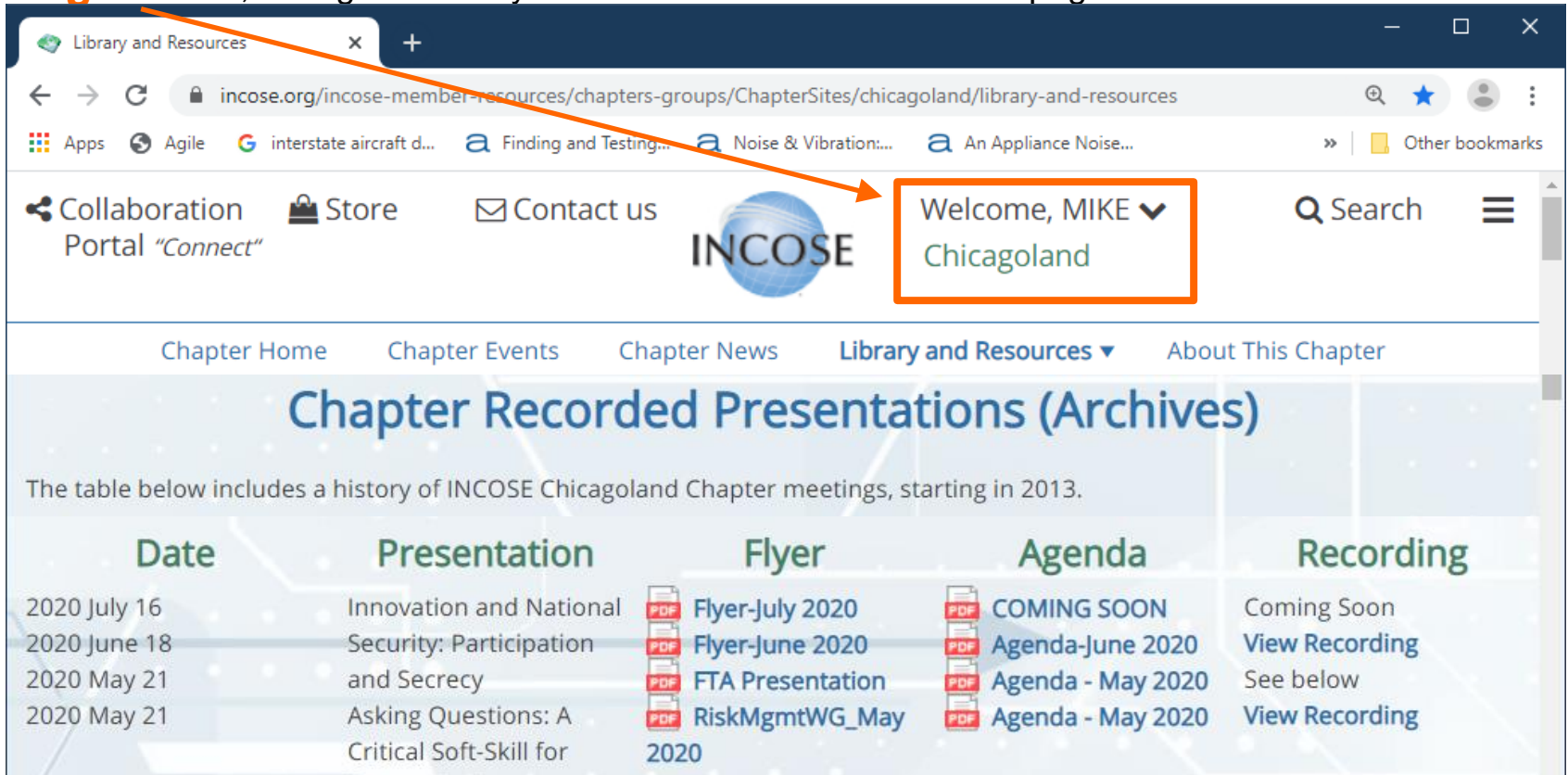


Benefits of INCOSE Membership









Professional Development (cont.)

3. Recordings of speakers at Chapter Meetings from previous months

Log in first, then go to Library and Resources tab of our home page



The screenshot shows a web browser window with the URL `incose.org/incose-member-resources/chapters-groups/ChapterSites/chicagoland/library-and-resources`. The user is logged in as 'MIKE' and is viewing the 'Library and Resources' tab. The page title is 'Chapter Recorded Presentations (Archives)'. Below the title, there is a table with the following data:

Date	Presentation	Flyer	Agenda	Recording
2020 July 16	Innovation and National	 Flyer-July 2020	 COMING SOON	Coming Soon
2020 June 18	Security: Participation	 Flyer-June 2020	 Agenda-June 2020	View Recording
2020 May 21	and Secrecy	 FTA Presentation	 Agenda - May 2020	See below
2020 May 21	Asking Questions: A Critical Soft-Skill for	 RiskMgmtWG_May 2020	 Agenda - May 2020	View Recording



Benefits of INCOSE Membership (Cont.)

Professional Development (cont.)

4. Access to INCOSE Periodicals:

Digital versions are included with your membership. All published 4 times per year.

a) Systems Engineering (SE) Journal

Systems Engineering, INCOSE's scholarly journal, is a primary source of multidisciplinary information for the systems engineering and management of products and services, and processes of all types.

Members may access the journal online at the [Wiley InterScience - Systems Engineering](https://onlinelibrary.wiley.com/journal/15206858) site: <https://onlinelibrary.wiley.com/journal/15206858>

b) INSIGHT Magazine

INSIGHT is the Practitioners' Magazine of INCOSE.

Members may access the magazine online at the Connect site: <https://connect.incose.org/Library/InsightMagazine/default.aspx>

c) INCOSE Members Newsletter

Emailed out to members each quarter.



Benefits of INCOSE Membership

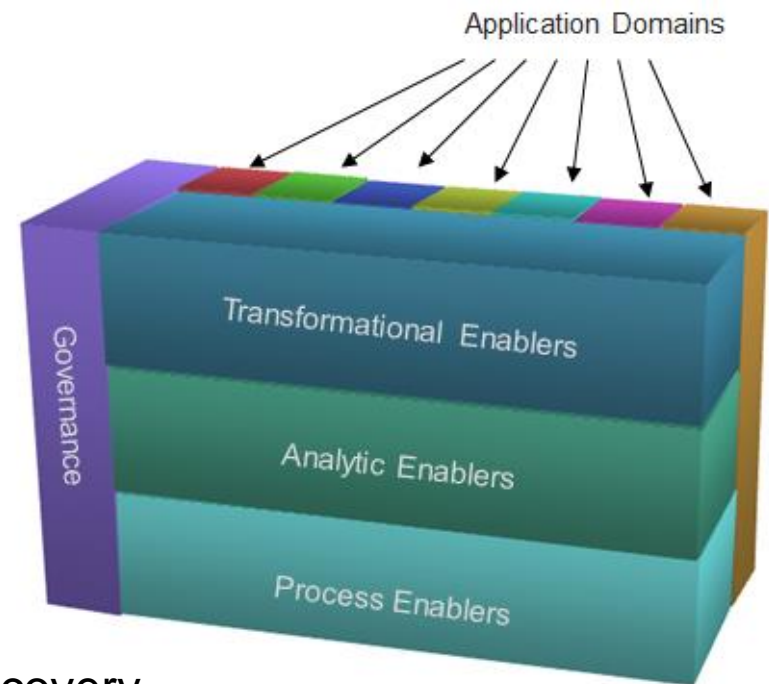
Professional Development (cont.)

5. Access to the output of 51 INCOSE Working Groups

<https://www.incose.org/iw2020/program/working-group-information-sheet>

Just a few examples:

- Automotive
- Lean Systems Engineering
- Configuration Management
- Healthcare
- Risk Management
- Natural Systems
- Systems Security Engineering
- Training
- Critical Infrastructure Protection and Recovery





Benefits of INCOSE Membership (Cont.)

Professional Development (cont.)

6. INCOSE Connect: content developed by Chapters and Working Groups
(Click on “INCOSE CONNECT” on the Chapter’s home page)



7. System Engineering Certification (ASEP, CSEP, ESEP)
(Click on “SEP Certification” on the Chapter’s home page)





Benefits of INCOSE Membership (Cont.)

Professional Development (cont.)

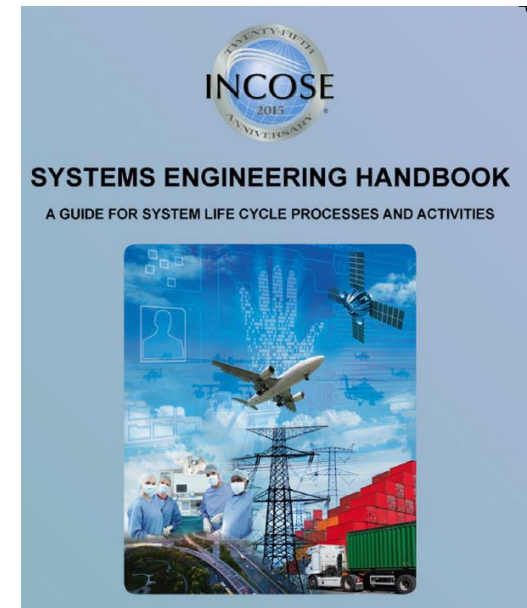
9. Access to the INCOSE Store for discounted and **free** publications:



Current texts on Systems Engineering, including

- Systems Product Line Engineering Handbook
- Guide for Writing Requirements
- System of Systems Primer
- Product Line Engineering Primer
- Systems Engineering Handbook

Free to download





Benefits of INCOSE Membership (Cont.)

Professional Development (cont.)

- 10.** Access to Tweets on **new job leads** (from Chapter web site):

Missing out on chapter news, events and promotions? Get on our [email list!](#)

Have a question for the INCOSE Chicagoland Chapter? email us at incose.chicago@gmail.com



- 11.** Access to INCOSE's **System Engineering Job Board**:
<http://incose.careerwebsite.com/>

- 12.** Free Resume Review Service

Email your resume to incose.resume@gmail.com for a review by Systems Engineering managers.



Benefits of INCOSE Membership (Cont.)

13. Networking Opportunities

18,000+ INCOSE members worldwide

Networking for yourself and for employees!

- Before and after Chapter events

- Supporting your Chapter

- Supporting a Working Group

- Workshops/Symposiums

- Share SE Job postings at meetings & in members-only e-mail

14. Leadership Opportunities

Chapter Board of Directors (listed on Chapter website, under 'About This Chapter')

Chapter Committee participation

- [Micro-volunteering Roles Available](#)

- (Roles as small as data entry or company networking)

Working Group participation (Two board members co-chair working groups!)



Benefits of Joining the Board of Directors

Expand your professional network and make new friends

Build professional capabilities

Elevate your personal brand

Support initiatives that are important to you

Your New Role	Imagine Your Name Here
Vice President	Open Position
Membership Chair	Open Position
Communications Chair	Open Position
Industry Outreach Representative	Open Position



Benefits of INCOSE Membership (Cont.)

16. Helping Others

- Share SE knowledge/experience with:
 - New SEs
 - Professional Societies
 - K-12, college students
- Advance the art/profession of Systems Engineering
- Establish your brand
- “Pay It Forward”



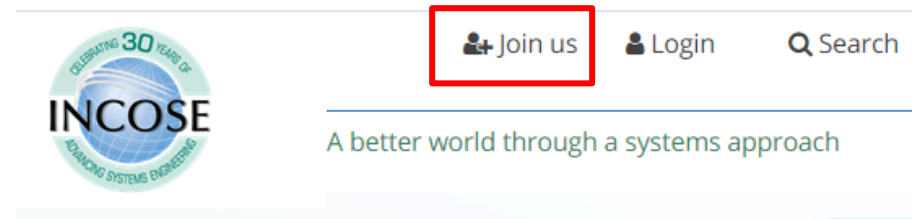
How to Join INCOSE

1. Go to www.incose.org
2. Click on “Join us”
3. Provide information, including your company / institution. This helps the chapter identify programs that will be of interest to the greatest number of chapter members.
4. Select chapter affiliation – “Chicagoland”
5. Pay \$160 for 1-year membership (or select a longer term at a lower rate)

Student membership - \$50

Refer a new member? Get an Amazon gift card!

Email Mike Gut, Chicagoland’s Secretary, at gut_mike@hotmail.com





CHICAGOLAND



SE CERTIFICATION



Three SE Certification Levels



If you have just started practicing – or want to start practicing – systems engineering, then ASEP is for you. This certification is for people at the beginning of their career as a systems engineer. The ASEP has “book knowledge” but not yet significant experience as a systems engineer.



If you are a practicing Systems Engineer with more than five years of systems engineering professional work experience, then CSEP is for you.



If you are a systems engineering leader with recognized systems accomplishments and have many years of systems engineering professional work experience, then ESEP is for you.

For more information on SE Certification, go to:

<https://www.incose.org/systems-engineering-certification/>



SE Certification Levels for experienced practitioners



WE KNOW A THING OR TWO BECAUSE
WE'VE SEEN A THING OR TWO.



Certification provides a means to be recognized for your knowledge and years of SE experience.



SEP Certification Mentors

If:

- you are an INCOSE member, and
- you are interested in becoming certified as a Systems Engineering Professional (SEP), and
- you have questions about the certification process

Then:

- you can contact one of our SEP Certification Mentors for assistance in getting your questions answered:

INCOSE Member	SEP Level achieved	Email Address
Steve Perich	CSEP	chitownse2@yahoo.com
Russell Kubychuck	CSEP	crk022@gmail.com
Chris Freund	ASEP	cfreund7@gmail.com



UPCOMING INCOSE EVENTS



Upcoming Board Meetings

Board Meetings on the first Thursday of each month

- Meetings are open to all members
- Next meeting: Thursday, May 5, 7:00 – 9:00 PM CT
(virtual mtg - attend via web conference)
- Plenty of opportunities to get involved!
 - Leadership and contributor opportunities available
 - Join us!

Interested in helping out?

Contact: John Bayless, Chapter President, via email:
john.bayless@brunswick.com



Upcoming Chapter Meetings

May 19, 2022

Systems Thinking Capability Elements And Associated Rubrics

as always, third Thursday of the month!

Chapter Meeting – April 21, 2022



CHICAGOLAND



Topic: Iliff's Hierarchy of SE – Understanding the Journey to (and From) System Mastery

Presenter: Randall C. Iliff, Eclectic Intellect LLC

Presentation Site: Remote. Online attendance only due to COVID-19.

Date: Thursday, April 21, 2022

Agenda: 6:30 - 7:00 PM CT – Announcements & Introductions

7:00 - 7:30 PM CT – Annual General Meeting

7:30 - 8:45 PM CT – Feature Presentation and Q&A

Abstract

After 40 years helping the world embrace the benefits of SE, it's clear that leaders struggle to understand and value our gift. As a profession we have clearly failed to motivate the market.

In the field of Psychology, *Maslow's Hierarchy of Needs* has become a classic model for explaining motivation and is widely used to explain why people don't do what others expect.

In this presentation I'll respectfully borrow Maslow's concept of hierarchy and share a development view consisting of five discrete need levels and twenty possible transitions between those levels. We'll explore common failure modes and explain why your strategy for advancing the idea of SE must be matched to the current level of your market. We'll even use the model to warn that institutional regression is more common than progress!

About Our Speaker

A seasoned Program Manager and expert Systems Engineer, Randy built a 40-year legacy of disruptive innovation in aerospace, medical, commercial and consumer markets.

As Vice President at bb7 he helped manage over 250 development projects per year. He was the SE Manager for IceCube, a cubic-kilometer scale observatory in Antarctica. To date, over fifty thousand people worldwide have attended his classes, keynotes and featured speaker presentations.

Randy is a charter member of the International Council on Systems Engineering (INCOSE), current representative for INCOSE on the INCOSE-PMI Alliance, and is a passionate supporter of bringing the logic of SE to the entire world.

Questions? For more information, go to <http://www.incose.org/Chicagoland/>.



INCOSE Chicagoland Spring Tutorial 2022

Lifecycle Concepts and Needs Definition Group Project

Instructor – Lou Wheatcraft

Dates: Saturday May 7th, Thursday May 12th, & Saturday 21st

Delivered Virtually, via Zoom

**Attendees will earn 10 PDUs for the tutorial
Certificates will be provided.**

*Eventbrite ticket sales are open! Tutorial pricing starts at \$50 (tbd).
Order now for Early Bird pricing, including*

*Special offer for the INCOSE Chicagoland Chapter membership drive:
Purchase a one-year INCOSE membership and receive discounted tutorial admission.*

Register online: <https://incose-chicagoland-spring-2022-seminar.eventbrite.com>

- ✓ *It is recommended to register prior to May 7th to allow time to do the prework!*
 - *Prework materials will be available April 7th.*



INCOSE IS June 25 to 30, 2022 HYBRID Event (Detroit, MI)

The Premier International Systems Engineering Conference
The Power of Connection

6 Days, 5 Tracks, 4 Keynotes, 79+ Presentations, Panels, Tutorials and More!



79 + Papers, Presentations on Systems Engineering

Monday - Thursday



4 Inspiring Keynote Speakers



25 Countries Represented

United States, United Kingdom, Norway, Sweden, Australia, France, China, Germany, Japan, Austria, South Africa, Spain, India, Lithuania, Canada, Lebanon, Denmark, Switzerland, Netherlands, Israel, Italy, Finland, Hungary, Brazil, Singapore, Thailand



24 Application Domains

Top Domains
Aerospace, Enterprise SE, Defense, Academia, Social/Sociotechnical and Economic Systems, Industry 4.0 & Society 5.0, Infrastructure, Automotive, Artificial Intelligence, Machine Learning, Emergency Management Systems, Autonomous Systems, Sustainment, Automation, Information Technology/Telecommunication, Environmental Systems & Sustainability, Rail, Urban Transportation Systems, Biomed/Healthcare/Social Services, City Planning, Oil and Gas, Energy, Service Systems, Maritime, Very Small Enterprises



37 Topics Represented

Top Topics
MBSE, System architecture/design definition, Systems Thinking, Modeling/Simulation/Analysis, Complexity, Needs and Requirements Definition, Processes, Teaching and Training, Business or Mission Analysis, Verification/Validation, Systems of Systems, System Integration, Project Planning, Project Assessment, and/or Project Control, Decision Analysis and/or Decision Management, Human-Systems Integration



7 Panels

Social/Sociotechnical and Economic Systems, Enterprise SE, Emergency Management Systems, Industry 4.0 & Society 5.0, Environmental Systems & Sustainability, Information Technology/Telecommunication, Academia, Sustainment



12 Tutorials

Needs and Requirements Definition, System Architecture/Design Definition, Resilience, System Security



INCOSE IS June 25 to 30, 2022 HYBRID Event (Detroit, MI)

Emphasis Areas included:

- Autonomous Systems
- Critical Infrastructure
- Digital Engineering
- Emerging Technologies
- Engineering Management
- Innovative Approaches: Agile, Iterative and Lean
- Industry 4.0 and Society 5.0
- Global Environmental Sustainment
- Systems of Systems (SoS)
- Systems Modernization
- Systems Resilience, Reliability, Safety
- Systems Security Engineering
- Socio-economic Sustainment



INCOSE IS June 25 to 30, 2022 HYBRID Event (Detroit, MI)

Sample of planned presentations

- *Artificial Intelligence for Systems Engineers: Going Deep with Machine Learning and Deep Neural Networks*
- *Augmenting Agile Software Development to Improve Systems Thinking*
- *Building Really Big Systems with Lean-Agile Practices*
- *How To Faithfully Model Systems Composed Of Millions Of Parts?*
- *Requirements Management Framework for Program RFQ Phase*



CHICAGOLAND



INCOSE IS June 25 to 30, 2022 HYBRID Event (Detroit, MI)

HYBRID EVENT

A hybrid event combines in-person and virtual elements in a way that unlocks a live dialogue between and among presenters and attendees—whether they join in person or online.



In person participation

In-person experience at the Huntington place, Detroit



Remote participation

Online experience hosted on our virtual event platform

Huntington place
1 Washington Blvd.
Detroit, MI 48226, USA

Contact us symposium@incose.net

More information on www.incose.org/symp2022



CHICAGOLAND



INTRODUCTIONS



Personal Introductions

▪
Stay muted, then unmute when you want to speak, then mute yourself when finished

- Name, Title & Company / locale
- Are you an INCOSE member, and if so, for how long?
- Job opportunities at your company, if any, or announce if you are looking for an opportunity

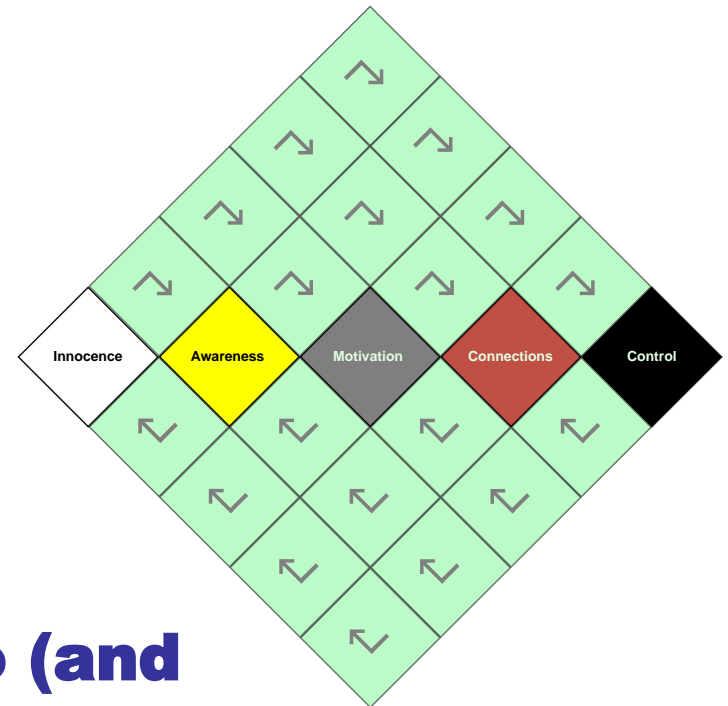


Tonight's Presentation

Speaker: **Randy Illif, Eclectic Intellect, LLC**

A seasoned Program Manager and expert Systems Engineer, Randy built a 40-year legacy of disruptive innovation in aerospace, medical, commercial and consumer markets.

As Vice President at bb7 he helped manage over 250 development projects per year. He was the SE Manager for IceCube, a cubic-kilometer scale observatory in Antarctica. To date, over fifty thousand people worldwide have attended his classes, keynotes and featured speaker presentations.



Topic: **Illif's Hierarchy of SE – Understanding the Journey to (and From) System Mastery**

[Start recording, Introduce Speaker, Transfer Screen to Presenter - Wait for Starting Slide]



FEATURE PRESENTATION

[Start recording]



Thank You for attending!
See you at next month's Chapter Meeting!

Topic: Systems thinking capability elements and associated rubrics

Presenter: Divya Behl, Dr. Susan Ferreira