



October 2021 Joint Meeting

Joint Meeting of the INCOSE Chicagoland Chapter & American Institute of Aeronautics and Astronautics (AIAA) Illinois Section

October 21, 2021

Please MUTE your phone



October 2021 Joint Meeting

Agenda

- **6:30 – 7:00 PM CT** – Welcome, Announcements, Intros
- **7:00 – 8:30 PM CT** – Feature Presentation
Propfan Technology 1980's to 2021
Presenter: Tom Fey



MEMBERSHIP



New Members

Welcome to New Members within the last month!

<u>Name</u>	<u>Company/Institution</u>
Mohammed Albadrani	Eaton
David Arntz	John Deere
Brady Beekman	Eaton
Terry Fruehling	LionThorn, LLC
Tamara Niedzwiecki	Whirlpool



October 2021 Joint Meeting

Renewing Members

Thank You for renewing your membership

<u>Name</u>	<u>Company/Institution</u>
Russell Kubycheck	Progress Rail Locomotive
Malcolm Lunn	Ford Motor Company
Golam Bokhtier	Woodward, Inc.
Robert Day	John Deere
Christine Love	Northrop Grumman
Imuentiyan Oyesiku	UL
Farouk Bonilla	The George Washington University
Christian Grigoleit	Oshkosh Corp.
Eliotro Hernandez	Hill-Rom
Srinivasa Reddy	Cummins Inc

Benefits of INCOSE Membership

Professional Development

1. **Monthly speakers at Chapter Meetings** on topics relevant to System Engineering (later in this meeting)
2. **INCOSE Virtual Community.** Participate live or view recorded meetings with recognized Systems Engineering experts.

SEPs can earn PDUs for attending!



INCOSE Systems Exchange Cafés



INCOSE Webinar Showcase

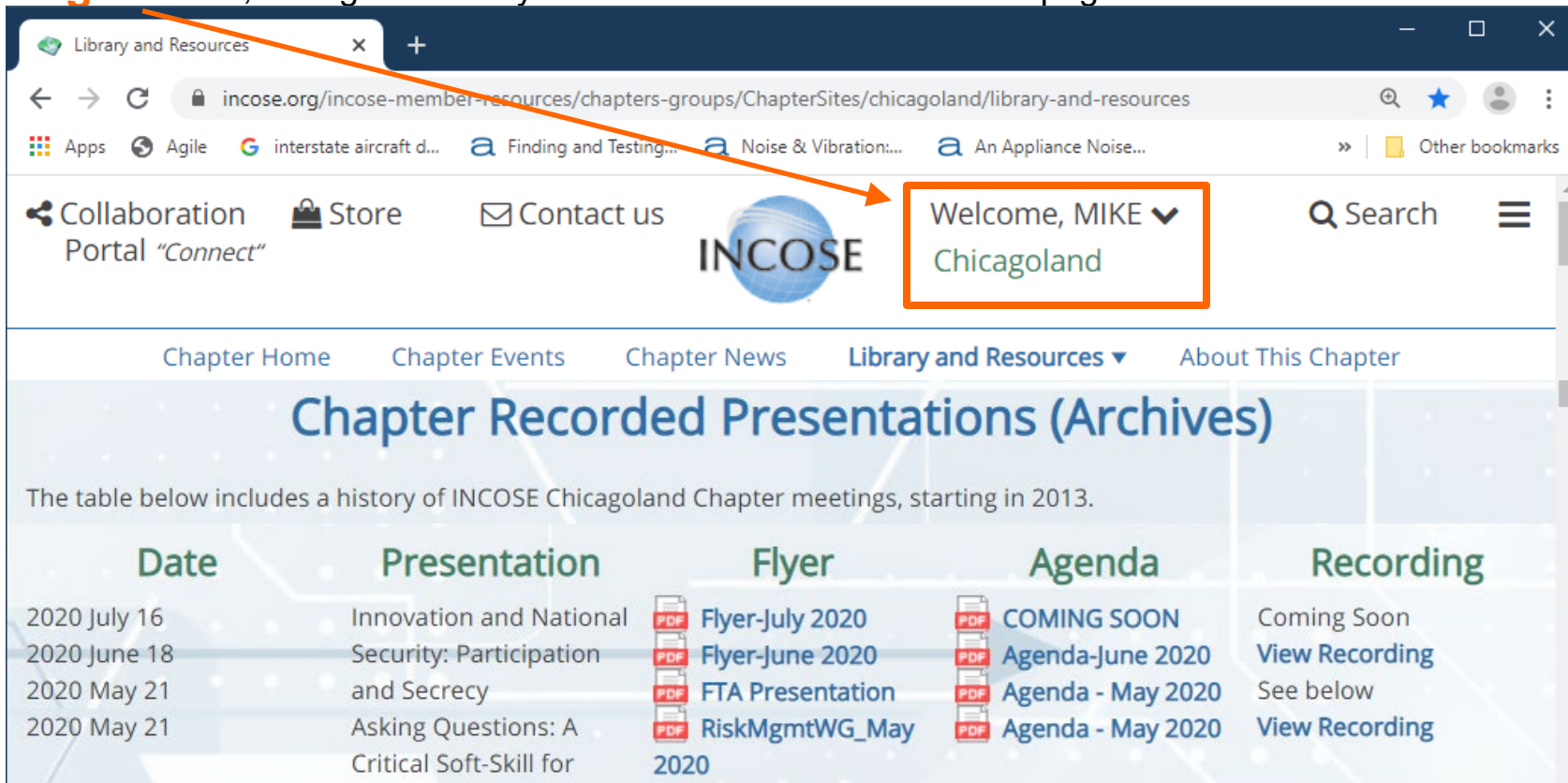
incose.org/about-incose/community

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 the INCOSE Chicago Chapter website. The 'Library and Resources' tab is selected in the top navigation bar. The user is logged in as 'MIKE' and the page displays 'Chapter Recorded Presentations (Archives)'. The table below lists the history of INCOSE Chicago Chapter meetings, starting in 2013.

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	 RiskMgmtWG_May 2020	 Agenda - May 2020	View Recording
	Critical Soft-Skill for			



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

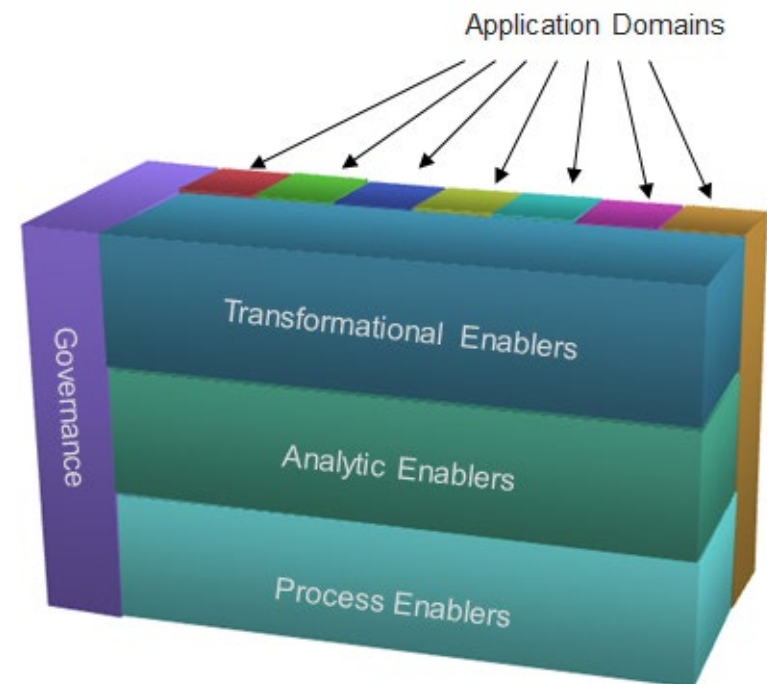
Professional Development (cont.)

5. Access to the output of **50 INCOSE Working Groups**

<https://www.incose.org/incose-member-resources/working-groups>

Just a few examples:

- Automotive
- Defense Systems
- Configuration Management
- Healthcare
- Risk Management
- Integration, Verification & Validation
- Small Business Systems Engineering
- Space Systems
- Value Proposition Initiative





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.)

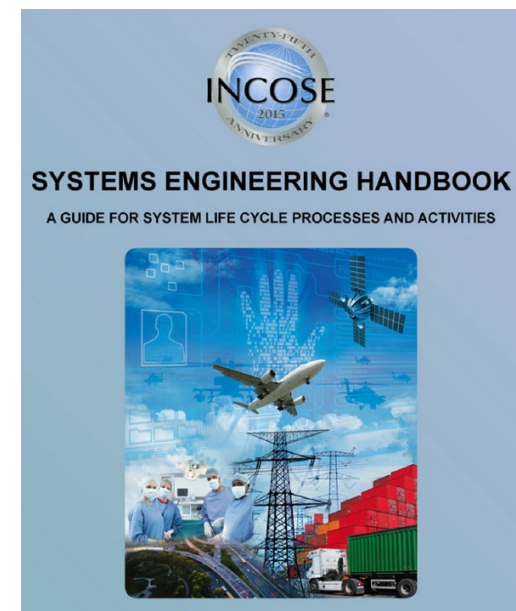
7. Access to the INCOSE Store for discounted and **free** publications:



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.)

8. 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



9. Access to INCOSE's **System Engineering Job Board**:

<http://incose.careerwebsite.com/>

10. Free Resume Review Service

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



Benefits of INCOSE Membership (Cont.)

11. 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

12. 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 INCOSE Membership (Cont.)

13. 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”



October 2021 Joint Meeting

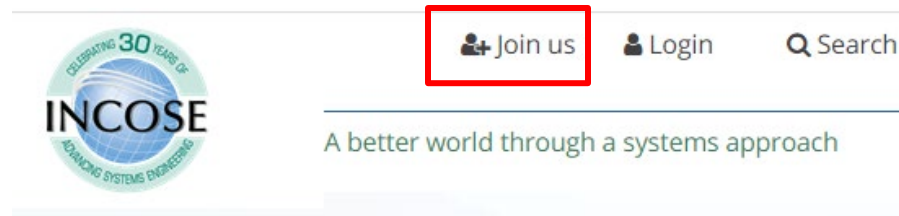
How to Join INCOSE

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 Richard Matt, Membership Chair, at richard.matt@incose.org





VOLUNTEER OPPORTUNITIES



2022 Elections for Chapter Officers

This October, we will be holding our Annual Election for these Chicagoland Chapter Board of Directors positions:

- 1) President
- 2) Vice President
- 3) Secretary
- 4) Treasurer
- 5) Director At Large (2 positions)

All Chapter members will receive a voting ballot via email.

If you are interested in serving on the 2022 Chapter Board of Directors, contact Mike Gut, Chapter President.

mike.gut@incose.org



2022 Appointed Positions

In addition to elected officers, the Chicagoland Chapter Board of Directors has these appointed positions:

Program Chair

Membership Chair

Communications Chair

Academic Representative

Industry Outreach Representative

Web Master

If you are interested in serving on the 2022 Chapter Board of Directors, contact Mike Gut, Chapter President.

mike.gut@incose.org



Volunteer Opportunities

These positions are open

Ambassador (for your company)

Video Editor

Volunteer Coordinator

Interested in helping out?

Contact: Mike Gut, Chapter President, via email:

mike.gut@incose.org



Call for Presenters and Topics

Have a particular SE technique you would like to share?

Would you like to showcase how SE is used at your company?

Are there SE tools and skills that would benefit your career?

Let us know!

Contact Gary Oswald, Program Chair:

oswaldgary33@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, **November 4**, 7:00 – 9:00 PM CT
(virtual mtg - attend via web conference)
- Plenty of opportunities to get involved!
 - Leadership and contributor opportunities available
 - Grow your networking!

Interested in helping out?

Contact: Mike Gut, Chapter President, via email:

mike.gut@incose.org



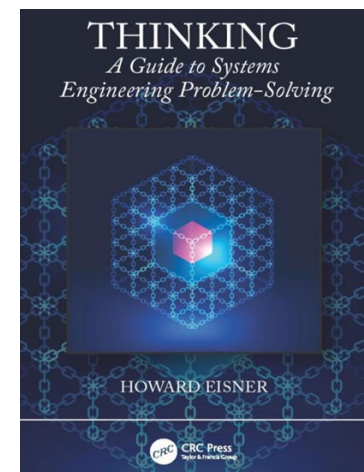
November Chapter Meeting

Dr. Howard Eisner, Professor Emeritus, George Washington University,
presenting his book:

Thinking:

A Guide to Systems Engineering Problem-Solving

**A copy of this exciting book will be raffled off at the
end of the meeting. By registering and attending, you
will automatically be entered in the raffle!**



Wednesday, November 17!



CHICAGOLAND



October 2021 Joint Meeting

Systems Engineering in Healthcare Conference

“Advancing the Practice of Systems Engineering in the Healthcare Industry”

Tentative Agenda -

- **Friday, October 29, 2021**, 1-5 pm USA Eastern Time
Session 1: Requirements Tools to Meet FDA Design Control Requirements
- **Friday, November 05, 2021**, 1-5 pm USA Eastern Time
Session 2A: Systems Responses to COVID-19 and Future Pandemics
Session 2B: User View on Requirements Tools
- **Friday, November 12, 2021**, 1-5 pm USA Eastern Time
Session 3A: Linking SE Models with Simulations for Device Development
Session 3B: System Approaches to Tracking Pandemic Responses
- **Friday, November 19, 2021**, 1-5 pm USA Eastern Time
Session 4: Lean Healthcare Systems Engineering

<https://www.incose.org/hwg-conference>



Healthcare
Working Group 

INCOSE Chicagoland Fall Seminar 2021

Correcting Systems Engineering Performance Contributions to Project Technical, Cost, and Schedule Performance Issues

Friday, November 12th

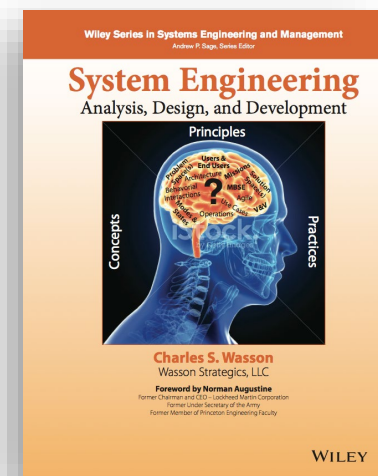
- ❑ Explore the current state of Systems Engineering practice and its issues.
- ❑ Gain a better perspective as to how SE contributes to project performance issues.
- ❑ Learn corrective action solutions to “takeback” to your organization to deal with the SE contributions to project technical, cost, and schedule performance issues.
- ❑ Participants will receive electronic copies of seminar reference materials in advance

Presenter, Charles Wasson, INCOSE Fellow and ESEP, will provide an overview of the seminar at the INCOSE Chicagoland Chapter Meeting on Thursday, October 21st

Two free copies of his book, *System Engineering Analysis, Design, and Development Concepts, Principles, and Practices* will be raffled to seminar ticket holders tonight, and at the October Chapter meeting!

[Early Bird registration open!](#)

<https://incose-chicagoland-2021-fall-seminar.eventbrite.com>





CHICAGOLAND



October 2021 Joint Meeting

AIAA



A FEW SHORT INTRODUCTORY REMARKS



Harry H. Hilton and David L. Carroll



Chair, AIAA Illinois Section

Professor Emeritus Aerospace Engineering
University of Illinois at Urbana-Champaign
316 Talbot Lab., MC-236
Urbana, IL 61801
h-Hilton@Illinois.edu

Vice-Chair, AIAA Illinois Section

President
CU Aerospace
3001 Newmark Drive
Champaign, IL 6182
carroll@cuaerospace.com

The American Institute of Aeronautics and Astronautics (AIAA) Illinois Section members thank the INCOSE Chicago Chapter for having us join their Chapter meeting. We look forward to future possible joint technical meetings.



The AIAA Illinois Section covers the entire state with member clusters:
North of I-80, Peoria, Quad Cities, Champaign-Urbana,
Illinois territory across from Saint Louis, and Carbondale.
The East Saint Louis members belong to the Saint Louis AIAA Section
(Boeing).

Member clusters over large state has made attendance
at meetings very small (embarrassingly so), disjointed,
and had fractured the Section over many years

However, ZOOM may have come to the rescue to increase attendance
and enable a more dynamic Illinois Section



CHICAGOLAND



October 2021 Joint Meeting

Officers/Subcommittee Chairs working to get AIAA Illinois Section re-energized:

Chair: Harry Hilton

Vice-Chair: David Carroll

Treasurer: John Prussing

Vice-Treasurer: **VACANT**

Secretary: Aidan Dreher

Communications: Erin Berry

Honor & Awards: Shawn McLevige

Public Policy: Mordechai Levin & Mark Wentland

Technical: Arpit Tiwari

STEM K-12: Pam Greyer

University: Ezunial Burts

Young Professionals: Akash Patel

Membership: Ashraf Oman

Student Branch: **VACANT**

Members-at-large: Kiruba Haran

Je Ir Ryu

Skye McCord

Other Items:

- 1) Volunteers to fill open positions – contact Harry and/or David if interested**
- 2) Future Meetings and Presenters – contact Harry and/or David with suggestions**
- 3) Need to set up next Section Officer/Subcommittee Chairs meeting**





INTRODUCTIONS



Personal Introductions

For this online meeting, we will do individual introductions, proceeding in the order of the day of your birthday: **1st, 2nd, 3rd, etc.**

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

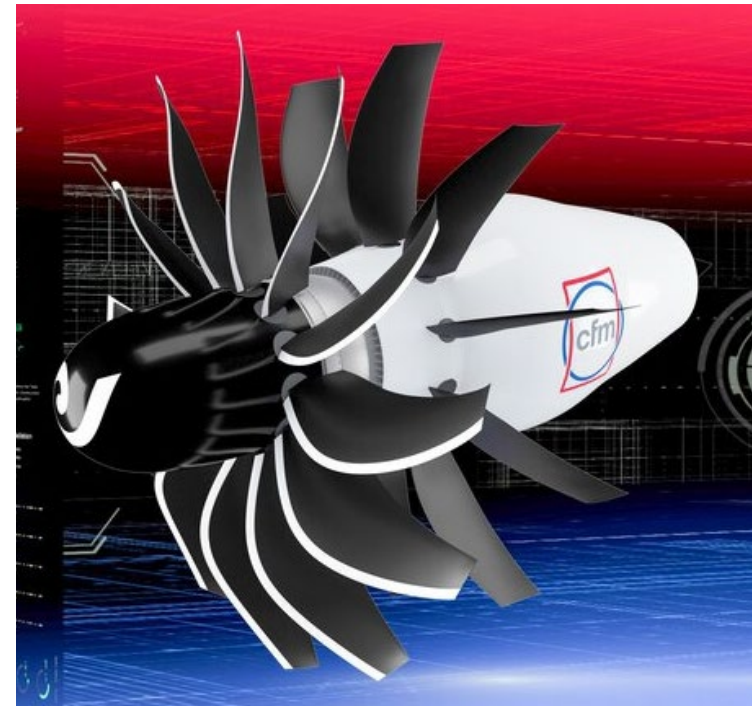
- Name, Title & what do you do (30 seconds)
- Company / locale
- Are you an AIAA or INCOSE member?
- Job opportunities at your company, if any, or announce if you are looking for an opportunity



FEATURE PRESENTATION

[Start recording]

Propfan Technology 1980's to 2021



Tom Fey – Student of Propulsion Technology

The history of the founding technologies, developmental partnerships, various design strategies, and challenges of the Open Rotor / Propfan propulsion system will be discussed.



INCOSE Chicagoland Fall Seminar 2021

Correcting Systems Engineering Performance Contributions to Project Technical, Cost, and Schedule Performance Issues

Friday, November 12th

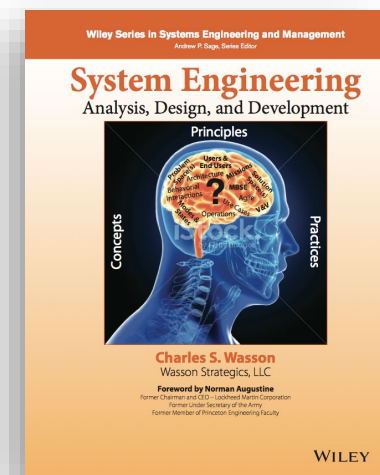
- ❑ Explore the current state of Systems Engineering practice and its issues.
- ❑ Gain a better perspective as to how SE contributes to project performance issues.
- ❑ Learn corrective action solutions to “takeback” to your organization to deal with the SE contributions to project technical, cost, and schedule performance issues.
- ❑ Participants will receive electronic copies of seminar reference materials in advance

Presenter, Charles Wasson, INCOSE Fellow and ESEP, will provide an overview of the seminar at the INCOSE Chicagoland Chapter Meeting on Thursday, October 21st

Two free copies of his book, *System Engineering Analysis, Design, and Development Concepts, Principles, and Practices* will be raffled to seminar ticket holders tonight, and at the October Chapter meeting!

[Early Bird registration open!](#)

<https://incose-chicagoland-2021-fall-seminar.eventbrite.com>





October 2021 Joint Meeting

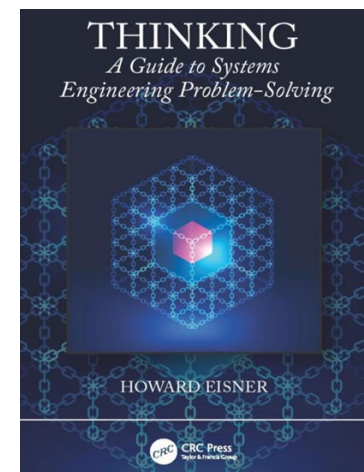
Next Month:

Dr. Howard Eisner, Professor Emeritus, George Washington University,
presenting his book:

Thinking:

A Guide to Systems Engineering Problem-Solving

A copy of this exciting book will be raffled off at the
end of the meeting. By registering and attending, you
will automatically be entered in the raffle!



Wednesday, November 17!