

Systems Engineering: Challenges in the Near Future

David A. Flanigan, PhD 19 January 2022

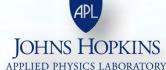
Champions and Practitioners of Systems Engineering



- Where we've been...
- Where we're at...
- Where we're going!

















INCOSE Who is the Chesapeake Chapter?

- The Chesapeake Chapter was founded in 1994
- Part of the Americas Sector
- ~300 members

2020 Chapter Circle Winners Awarded in 2021

President's Award for Outstanding Chapter		Director's Award for Most Improved Chapter	
India		Huntsville	
Platinum Award Chesapeake Los Angeles San Diego	Gold Circle Award Chicagoland India	Silver Circle Award Cleveland-Northern Ohio Enchantment Finger Lakes Great Plains Huntsville Israel Italy North Texas Southern Maryland	Bronze Award Atlanta Hampton Roads Area Michigan Midwest Gateway

Interactive Chapter Map

2020 Good Neighbor Awarded in 2021

Chesapeake

https://www.incose.org/about-incose/incose-recognition/chapter-awards https://www.incose.org/incose-member-resources/chapters-groups/incose-chapters Champions and Practitioners of Systems Engineering





INCOSE What we've done...











PRESIDENT AWARD













Who we are in 2021

2021 Board of Directors

Associate Directors

WebMaster - Mr. Paul Martin, ESEP Photography - Mr. Gundars Osvalds, ESEP Social Media - Jim Campbell

Chapter Ambassadors

The Engineers Club - Mr. George Anderson, ESEP University of Maryland College Park Chapter Student Division - Mr. David Alldredge, ESEP The Maryland Board for Professional Engineers (PE) - Mr. David Fadeley, ESEP

Chapter Special Interest Group (SIG) Chairs

Youth STEM Local Science Fairs - Mr. Clinton Hilliard, CSEP Scholarship SIG Chair - Mr. Bob Levin ESEP Summit Chair - Mr. George Anderson, ESEP



Jeff Berlet, ESEP

- · President-Elect-2020
- · President-2021
- President-Past-2022

Read More →



Dr. David Flanigan, CSEP

- · President-Elect-2021
- · President-2022
- · President-Past-2023

Read More →



Mark Evans, ASEP

- · President-Elect-2019
- · President-2020
- Past-President-2021

Read More →



John Boccio, ESEP

Treasurer 2021 - 2022

Read More →



Jim DeCamp, ASEP

Secretary 2019 - 2021

Read More →



Clinton Hilliard, CSEP

· Programs 2020 -2021

Read More →



Michael S. Anderson, CSEP

· Communications 2021 -2022

Read More →



Mark Kaczmarek, ASEP

Membership 2018 -2021

Read More →





INCOSE Who we are in 2022

















President-Elect: Dr. Steve Biemer

Programs Director: Mr. Jason Sohlke

Secretary: Ms. Jennifer Rainey, CSEP

Membership Director: Mr. Mark Kaczmarek, **ASEP**

https://www.incose-cc.org/blog/introducing-the-new-incoming-2022-incose-cc-board-members





INCOSE What we do as a chapter...

- Monthly chapter meetings
- STEM / Academic Fair
- Recruiting events (reStart)
- Social events
- SEP recognition gala
- Winter awards gala
- International events (INCOSE IW, IS)
- Regional events













What we did in the last two years

- 2020
- Started with live events
- Worldwide pandemic
- Adapted to virtual delivery and connections
- International events were affected as well
- IW live; IS virtual















INCOSE What happened last year

- 2021
- Continued virtual connections
- IW virtual; IS virtual
- Learned from last year and matured our virtual connections
- More events continued to be virtual
- More events were open and available

16th Annual System of Systems Engineering Conference Online from Västerås, Sweden, June 14-18 2021 http://sosengineering.org/2021/







And we finished 2021 with some live events!











- For the near future...
- We'll continue to follow CDC guidance as it affects live events
- Continue to leverage virtual events and connections
- Leverage last year's survey and include an early new survey to help shape program direction
- INCOSE IW 2022 (end of January) hybrid event; IS 2022 (hybrid?)
- Look for some creative use of live events where possible
- Outdoor events
- Collaboration with neighboring chapters live and virtual
- SEP encouragement & recognition







Interested in certification? We can

help!

- Nearly 2/3 of our chapter is certified
- Certification advisors
- Certification assistance
- Certification recognition at IS, IW, Chesapeake Chapter
- We have plenty of resources on certification

– just ask!





Intro to certification

https://www.youtube.com/watch?v=jZh6HZ0le9A



2021-10-11: Understanding the INCOSE SEP Certification Process (Martin)

2021-10-11: Understanding the INCOSE SEP Certification Process (Martin)

https://www.youtube.com/watch?v=GMCjqt7oiw0



- There are plenty of ways to get involved in the chapter:
- Programs committee plans events, monthly meetings
- Communications committee to connect with the world!
- Individual contributions welcomed:
 - Do you have a class or book that can help others?
 - How about a new SE tool or technique?
 - Do you have a technical talk or tutorial subject?
- Join an INCOSE working group!
 - Each month, we'll include a short description of a WG
- Are you a CSEP? Do you need PDU? Ask us!



- Chapter meetings 3rd Wednesday of the month
- Program committee meetings last Wednesday of the month
- INCOSE IW 2022 January
- Chapter Survey 1st quarter, see last year's survey: https://www.incose-cc.org/blog/incose-chesapeake-chapter-survey-2021
- Chapter Operating Plan March, archived at: https://www.incose-cc.org/blog/2021-incose-chesapeake-chapter-operating-plan
- INCOSE IS 2022 July
- SEP recognition event August?
- Winter gala December



INCOSE Other links of interest

- INCOSE news & events: https://www.incose.org/events-and-news
- SOSE 2022: http://sosengineering.org/2021/
- 7th Annual Systems Engineering in Healthcare Conference, 26-28 April 2022: https://www.incose.org/hwg-conference
- Great Lakes / North-Central Regional Conference (GLNC): https://www.incose.org/glnc2021/home/when-where
- Western States Regional Conference (WSRC): https://www.incose.org/wsrc/wsrc2021/home/when-where
- New England fall workshop: https://www.neincose.org/2021-incose-ne-fall- workshop
- INCOSE CC YouTube channel: https://www.youtube.com/channel/UCcsgkOop cvTG- CG8DNHOQ