INCOSE Chesapeake Chapter

Laurel, MD 20725-0535

INCOSE Chesapeake Chapter International Council on Systems Engineering

E-Newsletter

July 2016 Back Issues



P.O. Box 535

Ellie Gianni President, ESEP

President's POV - July 2016
WISE Membership Drive

On June 24 the Chesapeake Chapter Women in Systems Engineering (WISE) hosted a membership drive, WISE and



Wine. This was a free event open to everyone and

"WISE and Wine"

generously hosted by <u>Jovian Concepts</u>, <u>Inc.</u> at their office in Columbia, MD. Three new members joined the chapter as a result of this event! I presented an overview of the

work we do within our chapter to help further the careers of our members and the certification for those interested in pursuing future systems engineering professional credentials. If you are interested in certification mentoring, we have members within the chapter who can help you navigate through the system and complete the application process. Please feel free to contact me at president@incose-cc.org if you need any help in this area.



(Left to right) Christie Best, WISE President-Elect, the lucky drone winner raffle recipient, Ame Fox from the National Oceanic and Atmospheric Agency (NOAA), and Myra Gross, ESEP, WISE President.

June CSEP Training with CTI and Dave Mason, ESEP

On June 13 the chapter facilitated the presentation of a CSEP and ASEP Exam Preparation Training Course at APL. Certification Training International's (CTI's) David Mason, ESEP, provided the training for the week. There were a number of participants ranging from engineers with little to no Systems Engineering experience to seasoned engineers with years of experience. The dialog and exchanges within the group were energetic and informative. CTI will return in February to offer the same course at APL.

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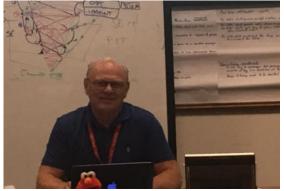
This is the monthly newsletter for INCOSE
Chesapeake, a local chapter of INCOSE International. We are a not-for-profit organization dedicated to providing a forum for professionals practicing the art and science of Systems Engineering in the Northern & Central Maryland & Southern Pennsylvania area.

Join INCOSE Today

http://www.incose.org/about /Membership/Join You can register on the CTI web site at:

http://www.certificationtrainingint.com/csep-preparation-course/

While Mr. Mason was in town providing SEP training, we invited him to attend our monthly dinner meeting and lecture as our Chesapeake Chapter guest. There, we awarded him a certificate of appreciation and the gift of a caffeine delivery system



Mr. David Mason, ESEP, at the helm in the CSEP training course held at JHU APL.

for his role in providing this training. He will also return to provide this training in February. We look forward to seeing him then.

Finally, our President-Elect, Mr. Mike Pafford provided a presentation during a lunchtime meeting to 36 attendees from the PMI Baltimore Chapter on June 27 entitled "Agile Project Planning". Mike will be presenting a tutorial on this same topic on July 15 to the INCOSE Southern Maryland Chapter.

We are looking forward to our travel to Edinburgh Scotland in mid-July and look forward to seeing our friends and colleagues there! Enjoy your summer.

Annual New Board Members Election and Timetable

George Anderson, ESEP, Past President and Nominating Committee Chair

The 2016 Elections for the Board of Directors (BOD) will be held in September and the call for nominations is open until August 30, 2016. This year, we will vote to elect the Treasurer and Communications chairs as well as the President Elect. As in past years, we will provide an electronic ballet to every member in good standing as listed by the latest roster provided by INCOSE International as of August 30, 2016. As a reminder, Corporate Advisory Members (CAB), student members, and WISE members who have not yet joined INCOSE are not eligible to vote in the BOD member election.

This year, the nomination committee consists of Past President George Anderson, and Secretary Craig Tyler. To express a desire to run or recommend another member please contact the committee at George.Anderson@incose.org or phone. 410-206-8285.

How does our Board of Directors work and why is it important to you, the individual chapter member?

The BOD acting in session has the ultimate decision authority in all matters governing the chapter's affairs. This authority is exercised by reaching consensus on all substantive matters before it using Robert's Rules of Order. These rules of procedure are mandated in the Constitution and Bylaws. As such, each member's authority is limited to the right



The Chesapeake Chapter is always looking for volunteers to speak at our upcoming meetings! Please contact our Programs Director at programs@incose-cc.org if you would like the opportunity to speak or can recommend someone.



The Chesapeake Chapter of INCOSE is proud to recognize the following organizations for sponsoring our endeavors to expanding the understanding and appreciation of Systems Engineering in the local area:



to enter motions, speak in debate and vote. Further, after the BOD has reached a decision on a matter, all members are expected to support the decision.

If this sounds boring, one may be missing the point. Rules of order are probably the best risk reduction mechanism ever developed for volunteer organizations. Given the typical apathy of the majority of professional society members (I suggest up to 80%), there is little likelihood of a pool of volunteers willing to serve on any governing body. Instead, the members who step forward almost always have personal agendas that they wish to promote while serving. Sometimes this is good and sometimes it is not. At Chesapeake, we have seen it all: good and bad board members and good and bad agendas. We also have seen great dedication and inexplicable dereliction. Thanks to Roberts Rules and the rule of the majority, however, you, the membership can have a high degree of confidence that the Chapter will not stray too far from working towards its core goals

So what is the best reason to serve our Chapter as a board member?

and its responsibilities to INCOSE International.

From my experience, it's the opportunity to gain the respect of your fellow professionals while learning or improving upon valuable leadership and professional skills that are not part of your current day job. It's also about distinguishing oneself and showing that you are ready to assume more responsibility in your career. It would be a mistake, for instance, to ignore the impression made on our local employers as they observe the Chesapeake Chapter's stellar performance over the past few years.

To sum up, our chapter BOD does not need the most experienced or knowledgeable board members to survive. Our process will keep the Chapter going but some of you may be missing an important opportunity to realize a unique expansion of your views on who and what is important in your chosen profession.

For 2017, nominees are needed for the following Chapter Officers and Director vacancies:

- President-Elect: January 1, 2017- December 31, 2017, plus 1 year ending in (December 31, 2018) as President and 1 year ending in (December 31, 2019) as Past President
- *Treasurer*: January 1, 2017 December 31, 2018
- Communications Chair: January 1, 2017 December 31, 2018

Additional details describing roles and responsibilities associated with these positions on the board are included in the Chapter Operating Plan posted on our web site at: http://www.incose-cc.org/2016-operational-business-documents/











INCOSE Chesapeake Chapter Programs Update



Gundars Osvalds Programs Director, ESEP

Gudan Owlde

Last month's Monthly Meeting presentation had us take a look at the future capabilities of industrial Robots. Dr. Craig Schlenoff and Dr. William Harrison presented the National Institute of Standards and Technology vision on future robot desired capabilities. Today robots can handle repetitive tasks but when

something goes wrong they have not been given the capability to recover. NIST has defined capabilities desired for future



Dr. Craig Schlenoff

robots and are sponsoring a competition to find competing solutions in the development of re-tasking robot that can pick up a dropped item so that the production line doesn't require shutdown and human intervention.

You can view the video here: https://youtu.be/3tt317N-oXA. Craig explains that the hard problem for robots is to recover when a part is dropped. William is pointing to one major need for a robot to perform: assembling kit of parts.



Dr. William Harrison

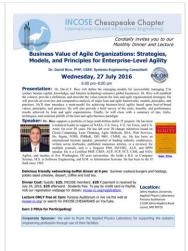
will provide a brief survey of the costs, benefits, and performance results achieved for your programs using the lean and agile paradigm. Dave wants to convince you to "STOP" how you run your organization and go AGILE.

Dr. David Rico has another report on agile development, "Business Value of Agile Organizations", scheduled for our July 27 free lecture. He will describe the value-system for lean and agile organizational strategies. He



Dr. David Rico

Program Note: This month our meeting will be held on the fourth Wednesday July 27th (due to conflict with INCOSE International Symposium) and it will be held at the JHU/APL Building 1.









The Professional's Book Review Series

George Anderson, ESEP, Past President and Nominating Committee Chair

Presenting the first of a series of reviews dealing with professional books that provide useful Systems Engineering insights.

THE ECONOMICS of STANDARDIZATION 1

Edited by Robert B. Toth, Standards Engineering Society, 1984

This 112 page paperback book is still published by the Standards Engineering Society (SES)² and has enjoyed a long publishing lifetime due to the cyclic pressures for eliminating standards organizations in large enterprises. While everyone likes to benefit from standards and standardization - paying to manage, create and employ them is expensive and presents a tempting opportunity for a newly graduated MBA in the company to start asking questions. You need to have this book handy if you expect to justify standards sections in your enterprise.

The book is divided into five chapters. Three of the chapters were originally stand-alone papers that address the issue very directly using logically developed methods of computing the cost and benefits of standards activities and using these methods to justify standards groups that are separate from the regular engineering staff. The fourth chapter introduces the National Aerospace Standard (NAS) 1524 which is presented in its entirety in the last chapter. I have chosen salient points from each of the chapters to suggest the book's utility.

Chapter 1. The Economics of Standards- A Pragmatic Approach

The pragmatic approach to funding an engineering standards group includes the use of calculations that show the cost avoidance as well as maintaining data on how many standards are supporting the company's products, processes and governance.

The actual value of a single standard grows as the volume of its applications expands. A single commercial airliner for example can employ over 2000 standards that control more than 155,000 instances of use. Commodity items such as fasteners or microprocessors are excellent examples of the economy of scale using standard design specifications.

Chapter 2. The Economics of Standards – A Qualitative Approach

An example of a qualitative approach to justifying standards management is a chart mapping six types of standards applications against the departments in an enterprise. Departments that utilize the majority of these applications can be identified as possibly being more efficient or worthy of study to increase the value and performance of other departments.



This Newsletter is to serve our members and is open to all for contributions. Do you have an interesting idea for an article? A review of a new book related to engineering?

Let us know. We'd love to hear about it. It may wind up in a future issue of our Newsletter.



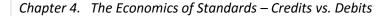


¹ http://www.ses-standards.org/?page=A4

² http://www.ses-standards.org/

Chapter 3. Don't Cry: Justify

A brief survey of how several Government agencies approached large procurement problems using analytical formulas to predict life cycle costs. The value of standards development was calculated and in a specific example the additional savings in testing and stocking costs considered.



This chapter presents the background of papers, conferences and individual efforts that moved the U.S. engineering societies towards the development of NAS 1524. The inclusion of the complete standard in chapter five is intended to be the defining statement of this book.

Chapter 5. NAS 1524 - Standardization Savings, Identification And Calculation

Is published by the Aerospace Industries Association (AIA). They are a lobbying group for U.S airlines and a recognized standards development organization (SDO)

Summary and Recommendations

A great deal of information is presented in this small book provided by unquestioned experts with years of broad experience in the application and development of standards. For the current \$12 price, a practicing SE should have one of these around when the green eyeshade crew comes in from corporate. My copy is underlined, dog-eared and even has tabs for the inevitable rematches. Get one today and get another for your boss.

Interested in Jobs & Networking

Contact Mark Kaczmarek at mkaczmarekengr@comcast.net
Or attend one of the Tech Expo Events in our area: https://www.techexpousa.com/





Many of you may have noticed the new Tech Expo logo in our recent communications. The INCOSE-CC BOD, in the interest of member's career development, attended the employment fair last month. We had the pleasure of meeting dozens of job seekers at the event. We would discuss the merits of the value-add of membership in our society through continuous career expansion and growth due to our dinner events and tutorials as well as material available at the national level. Please contact me at mkaczmarekengr@comcast.net if you are interested in staffing the booth at one of the upcoming events. CSEP's can receive PDUs for assisting the chapter.



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Let us know. We'd love to hear about it. It may wind up in a future issue of our Newsletter.



The Chesapeake Chapter of INCOSE is proud to recognize the following partner organizations and upcoming conferences that may be of interest to our membership.





Maryland BWI Marriott 2016 Events: August 10, September 22, October 12, November 16, December 8



Mark Kaczmarek, Membership Director, discusses the merits of INCOSE membership with a Tech Expo attendee on June 15 at the BWI Marriott.

Virginia Tysons Corner Ritz Carlton 2016 Events: August 11, September 15, October 13, November 3, November 15, December 7



Chicago Cyber Security Summit

Thursday, August 25, 2016 from 8:00AM to 6:00PM Hyatt Regency Chicago, 1
51 East Wacker Drive
Chicago, IL 60601
Register at http://cybersummitusa.com/chicago-2016/ with Promo Code INCOSE2016 to receive 50% a Full Summit Pass.

New York Cyber Security Summit

Wednesday, September 21, 2016 from 8:00 AM to 6:00 PM, Grand Hyatt New York, 109 E 42nd St.

New York, NY 10017.

Register at http://cybersummitusa.com/new-york-2016/ with Promo Code INCOSE2016 to receive 50% a Full Summit Pass.

Los Angeles Cyber Security Summit

Thursday, October 20, 2016 from 8:00 AM to 6:00 PM, Loews Santa Monica Beach Hotel, 1700 Ocean Ave.,

Santa Monica, CA 90401.

Register at http://cybersummitusa.com/los-angeles-2016/ with Promo Code INCOSE2016 to receive 50% a Full Summit Pass.



What people are saying about Chesapeake Chapter in 2015:

"... What a wonderful, innovative, and impactful year for the Chesapeake Chapter. I hope you, your board, and the entire chapter is proud of what you have accomplished..."

Past President, INCOSE









Events and Announcements

Scheduled Chapter Meetings and Monthly Dinner Lectures take place at the Johns Hopkins University Applied Physics Lab (JHU/APL) in the Building 1 Cafeteria and Parsons Auditorium and are held on the third Wednesday of each month unless otherwise noted. 6 pm for Dinner Meeting (\$20 in advance / \$25 at door). 7 pm for Lecture (Free).

- July 27 6 pm Dinner Meeting & 7 pm Lecture. The Business Value of Agile
 Organizations; Strategies, Models, & Principles for Enterprise-level Agility. Dr. David Rico.
- August 17 6 pm Dinner Meeting & 7 pm Lecture. Thomas Heffner, Design Strategist and Dennis Smith, Innovation Projects Specialist. "Design Thinking 101: What is Design Thinking and How Can it Help Your Organization Create a Culture of Innovation". (1 PDU).
- **September 21** 6 pm Dinner Meeting & 7 pm Lecture. Leonard Levine, Defense Information Systems Agency (DISA), "**DoD Perspective on UAF Data Models**"
- October 19 6 pm Dinner Meeting & 7 pm Lecture, James Martin, "New ISO 42020 Standard for Architecture Processes". [The next draft of this Standard will be out in September for comments that are due at the end of October. Please contact Ellie Gianni at mailto:eajanni@verizon.net.
- November 16 6 pm Dinner Meeting & 7 pm Lecture. SE Standards Update, Ken Zemrowski.

Other Events (Workshops, Tutorials, Symposiums, Galas)

- July 15, Friday, Mike Pafford, INCOSE Chesapeake Chapter President-Elect, "Agile ALM Project Planning Tutorial", 7:45 AM Breakfast, Tutorial 8:15 am 12 pm, Lunch 12-1 PM, Tutorial 1-3 PM, POC: Karl Geist, INCOSE Southern Maryland Chapter (kgeist@md.metrocast.net) (6 PDUs)
- July 15 July 22, International Symposium (IS) 2016 in Edinburgh, Scotland. Leadership Meetings start on July 15 followed by Tutorials and Workshops.
- August 20, Saturday Tutorial: "Design Thinking Learn the tools and methods of Design Thinking that will turn your organization into an Innovation powerhouse": Tom Heffner & Dennis Smith. 8 AM Breakfast, Tutorial 9 AM-12 PM, Lunch 12-1 PM, Tutorial 1-3 PM
- August 24 7th Annual Systems Engineering Professionals (SEP) Gala. Guest Speakers Ms. Courtney Wright, INCOSE PM for Certification and Ms. Kristen Baldwin, Acting DASD SE. REGISTRATION IS NOW OPEN! Register here by July 24, 2016 to receive the discounted rate: http://www.incose-cc.org/registration/. Corporate sponsors are needed. Contact Gundars Osvalds, programs@incose-cc.org
- September 24, Saturday 9 am 12 pm, "Beyond Thinking Outside the Box, For Entrepreneurs and Systems Engineers", Dr. Howard Eisner, Cost \$100. (3 PDUs)
- October 18 19, Tuesday and Wednesday, James Martin, "Systems Thinking Workshop" 8 am – 4:30 pm, JHU/APL at MP6, 7651 Montpelier Road, Room N111, Laurel, MD 20723. (16 PDUs)
- December 7th Chesapeake Chapter Holiday Party and Awards Ceremony



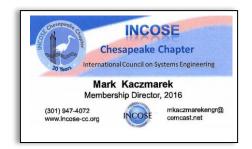






Chapter Business Cards

Please contact Mark Kaczmarek at membership@incose-cc.org to obtain your own Chesapeake Chapter business cards. Free to Chesapeake Chapter members.







Membership Arena

Mark Kaczmarek, Membership

The Chesapeake Chapter proudly welcomes our new members:

June 2016

- John A. Baker, Baker Consulting Services, LLC
- Cheri Jackson, Jovian Concepts, Inc.
- William Kelly
- Katrina Park
- Amanda Pollock, Textron Systems
- Robert Russell, Northrop Grumman Corporation
- Angela Satchell

May 2016

- Jeffrey Corey, Asymmetrik Ltd.
- Anwar Kittrell, Northrop Grumman Corporation

April 2016

- Joseph Dougherty, Northrop Grumman
- Holly Jeffrey, Northrop Grumman
- Irving Pollard, SPAWAR
- Kristen Handy, Booz Allen Hamilton
- Alex Duda, Northrop Grumman

March 2016

- Christopher Couch, Northrop Grumman
- Eric Hiltpold, Jovian Concepts

February 2016

John Shelton, Johns Hopkins University/APL







Keep up with the latest news and events. Find out about our new Board of Directors. Explore our extensive library of previous lectures from our Monthly Dinner Meetings. Learn of the Benefits of Joining INCOSE. Check out Systems Engineering education in the local area. All this and more awaits you at our INCOSE Chesapeake Chapter Website

For any comments or suggestions about this newsletter please e-mail our <u>President, Ellie Gianni</u> or our Communications Director, Pat Williams. We value vour feedback

Board of Director Officers, 2016

- President: Mrs. EleanoraAnn "Ellie" Gianni, ESEP
- Past President: Mr. George Anderson, ESEP
- President Elect: Mr. Michael Pafford
- Treasurer: Mr. Tony Gigioli

- Secretary: Mr. Craig Tyler, ESEP
- Communications: Mr. Pat Williams, CSEP
- Programs: Mr. Gundars Osvalds, ESEP
- Membership Committee: Mr. Mark Kaczmarek

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