INCOSE Chesapeake Chapter
International Council on Systems Engineering

INCOSE Chesapeake Chapter
P.O. Box 535
Laurel, MD 20725-0535

E-Newsletter

October 2017

President's Point of View

**Mike Pafford
President**

I need to start out this month by repeating an important Alert about upcoming Chapter Elections. Over the years, the Chesapeake Chapter has deservedly garnered many awards from INCOSE as one of its most productive Chapters world-wide. This continued very high level of Chapter productivity is due to volunteer initiatives from its strong membership and leadership from its Board of Directors. Four of the eight Board of Directors positions are up for election; President-Elect, Secretary, Programs Director, and Membership Director. The Chapter Past President, Ellie Gianni, is leading the Nominations Committee. Please review the Elections section later in this Newsletter, then immediately let Ellie or any other Board member know if you want more information about any of these open positions, or if you want to be a Candidate for any position.

Last month I attended one of the largest international software engineering conferences, the 2017 Atlassian Summit, held in San Jose, California. Over 3,200 software engineers from 42 countries spent a work week exchanging information on using the latest server-based, data center, and cloud-based tools in the collaborative conceptual analysis, architecture, design, and development of software-intensive system solutions. I shared systems engineering insights with many software engineering attendees, in my capacities as a general INCOSE representative, INCOSE Chapter President, Co-Chair of the INCOSE Object-Oriented Systems Engineering Method (OOSEM) Working Group, Co-Chair of the new INCOSE Systems and Software Interface (SaSI) Working Group, and Instructor of Software Systems Engineering in the JHU Whiting School of Engineering MS in Systems Engineering curriculum. My primary accomplishment at this conference was confirmation that systems engineers could use these current and modern tools and techniques to enhance and improve their roles and responsibilities as leaders or leading engineers on collaborative teams developing software-intensive system solutions.

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.

Communications Corner

**Myra Parsons Gross, ESEP
Communications Director**

The last several newsletter publications have focused on the current officers and directors of the Chesapeake Chapter. These profiles will culminate next month in the November issue with a little detail on the Communications Team and their work behind the scenes.

We are fast approaching the end of the year, with a pending new leadership team with the upcoming elections for several open positions. The continuing positions on the board of directors for 2018 include:

- Dr. Grace Crowder, ASEP - President
- Mike Pafford - Past-President
- Tony Gigioli, CSEP - Treasurer
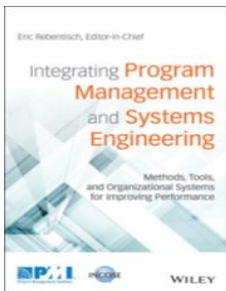- Myra Parsons Gross, ESEP - Communications Director

As noted in the Presidents POV article, President-Elect, Secretary, Programs Director, and Membership Director are the open positions for the term beginning January 2018. We welcome our members to pursue any of these positions or to volunteer in other capacities to support Chesapeake Chapter. Without the support of our membership, we cannot be successful.

Programs Update

**Gundars Osvalds, ESEP
Programs Director**

For Integrated Program Management and Systems Engineering - This month we are co-sponsoring our lecture series with the Program Management Institute (PMI) Baltimore Chapter. Two speakers have collaborated on a major effort by the INCOSE alliance with MIT and PMI and authored a book incorporating research supported over the past three years focused on the integration of systems engineering and project/program management practices. In addition to research, alliance members contributed knowledge of the field, existing tools and standards, and a wealth of practical experience. We have extended the length of our lecture series by 30 minutes to facilitate an in depth review and to allow time for questions and answers.

Randall C. Iliff has over 35 years of experience leading development efforts and has participated in all project phases. He is a seasoned large-project PM, as well as a recognized expert in Systems Engineering. Mr. Iliff is a charter member of INCOSE and currently serves as the INCOSE representative on an alliance between INCOSE, PMI, and the MIT Center for Program Excellence.

Stephen Townsend is PMI's Director for Network Programs. In this capacity, he leads special program initiatives, including development of

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.

a practice guide on agile methods; and a book on the integration of program management and systems engineering with INCOSE and MIT's Consortium on Engineering Program Excellence. Mr. Townsend has worked within PMI since 1999 in the areas of member services; chapter/community relations; business/government relations; and PMI's global development activities.

Announcements and Events

Networking, Dinner, and Lectures
Chapter Meetings are held at the Johns Hopkins University Applied Physics Lab, Building 1, on the third Wednesday of each month unless otherwise noted. The meeting starts at 6pm (Dinner $20 for Members, $25 Non-Members, $5 extra at the door, no charge for students) and the no-fee lecture starts at 7pm.

Board of Directors Meetings
Monthly Board of Directors (BOD) Meetings are held at the Johns Hopkins University Applied Physics Lab in Building 1, Barton Conference Room the second Wednesday of every month beginning at 6pm and ending at 8pm.

Upcoming Events
Please register for the below events at *http://www.incose-cc.org/registration* unless otherwise noted.

- **11-14 October (Wednesday through Saturday), 11ᵗʰ Annual INCOSE Great Lakes Regional Conference (GLRC 11),** Twin Cities, Minnesota. Information at: *http://www.incose.org/glrc11*.

- **18 October, Monthly Dinner Meeting, "Integrating Program Management and Systems Engineering",** Randall Lliff (INCOSE), Stephen Towsend (PMI), will be held as a joint meeting with the PMI Baltimore Chapter. One major effort of the INCOSE alliance with MIT and PMI has been to develop a book incorporating research our organizations have supported over the past three years focused on the integration of systems engineering and project/program management practices. In addition to research, alliance members contributed knowledge of the field, existing tools and standards, and a wealth of practical experience.

- **30 October-02 November (Monday through Thursday), EnergyTech 2017,** Cleveland IX Center, Cleveland, Ohio. Information at: *https://www.energytech.org*.

- **15 November, Monthly Dinner Meeting, "Maryland Traffic Engineering, use of Agile by the Maryland State Highway Administration (SHA)".**

- **6 December**, **INCOSE Chesapeake Chapter Holiday Party and Awards Ceremony.** *More Details to follow.*

- **29 January-2 February, (Monday through Friday), CSEP Certification Training Course,** JHU/APL, Building 200, Room 100, 8am to 5pm. Chesapeake Chapter Members receive a 20% discount. Certification Training International (CTI) offers a

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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.

CSEP (Certified Systems Engineering Professional) and ASEP (Applied Systems Engineering Professional) 5-Day Course focused on preparing you to successfully take the CSEP/ASEP Certification Examination conducted by INCOSE. The INCOSE Systems Engineering Handbook and course materials are included. Registration is open.

- **5-9 February 2018 (Monday through Friday), No Magic Training, "Applying UPDM 2 with MagicDraw",** taught at JHU/APL Building 200, Laurel MD**.** Applying UPDM 2/DODAF/MODAF with MagicDraw is a 5 day course for Unified Profile for DoDAF and MODAF (UPDM 2). The course focuses on implementation of UPDM 2 using core MagicDraw functionality and the MagicDraw UPDM 2 plug-in. Registration is open.

Special Interest

Nominations for 2018 Elections

Elections for the INCOSE Chesapeake Chapter (CC) Board of Directors (BOD) will be held in the very near future. The Board needs your assistance and is seeking candidates to fill the following positions in 2018:

- **President-Elect**: Term is 3 years (President-Elect, President, and then Past President)
- **Secretary**: Term is 2 years.
- **Programs Director**: Term is 2 years
- **Membership Director**: Term is 2 years

Please consider nominating a peer or volunteering yourself for one of these open positions. The future success of the Chapter depends on the support of its BOD and willingness of its members to step forward and support Chapter operations. The responsibilities associated with each open position follow (from the **2017 Chesapeake Chapter Operating Plan**).

If you are interested in any of these positions, or know anyone who might be interested, please contact any INCOSE Chesapeake Chapter Board of Directors (BOD) Member.

President-Elect:

- Coordinate with the CC BOD to remain informed, and help with Chapter business when necessary.
- Lead CC BOD and Chapter Meetings when the President is not present.
- Assist the Membership Director on membership drives and corporate and organizational outreach.
- With the CC Communications Director, support the success of the CC Newsletter.
- Work with the President and Past President throughout the year to compile and prepare evidence for the CC submission for the INCOSE Circle Awards.
- Chair the CC Constitution and Bylaws Update Committee, and with BOD approval select its members.

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 end up in a future issue of our Newsletter.

Secretary:

- Prepare minutes of all CC BOD meetings.
- Prepare Final Summary Report (Annual Report) of 2017 Chapter activities.
- Maintain Chapter records (e.g., meeting minutes, records of attendance, etc.).
- Maintain an account of the names of meeting, tutorial, and workshop attendees.
- Maintain the disposition of CC Mailbox Keys. Retrieve all incoming Chapter Mail.
- Organize and display CC records in a suitable format.
- Maintain and ensure access to Chapter historical documents and records.
- Manage Chapter physical assets in the Chapter Storage Locker.
- Inventory all Chapter assets, and maintain an inventory of these items.
- Manage all administrative actions and reports.
- Support the success of the CC newsletter.
- Support the CC annual membership survey.

Programs Director:

- Plan CC dinner meetings and lectures including coordinating meeting locations and scheduling speakers in coordination with the BOD.
- Negotiate food contracts, and execute the required reservations, food service, and menu selections.
- Plan and execute all other CC special, technical, and social events and activities, unless otherwise assigned by the BOD.
- Manage the reservations and receipts of all monies for all CC events.
- Maintain meeting formats and coordinate speakers, topics, moderators, and locations.
- Coordinate joint tutorials, workshops, or dinner lectures with other technical organizations in the region.
- Plan special events (e.g., the CC Annual Holiday Party, awards and recognition programs, SEP Gala, etc.).
- Coordinate special programs with other INCOSE Chapters.
- Manage Intellectual Property Releases for speakers.
- Support the success of the CC newsletter.
- Lead the development, analysis, and reporting of the CC annual membership survey.

Membership Director:

- Serve as the CC Corporate Outreach Director.
- Direct and control the CC Membership and Outreach Committees.
- Manage all formal efforts to maintain and increase the Chapter membership.
- Maintain Chapter Membership Database.
- Provide membership records data access to the CC BOD and collaborating committees.
- Manage member special recognition programs.
- Maintain and regularly update the Chapter Welcome Automated Welcome and Member Renewal Email System.
- Work with BOD to solicit support from corporate, government, and academic sponsors for CC activities and projects.
- Oversee the INCOSE Chesapeake Chapter Ambassadors Program.
- Support increased CC membership and engagement.
- Create and maintain all electronic records of CC Membership Committee processes and activities for Chapter documentation and continuity of operations.

What people are saying about Chesapeake Chapter:

"… 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

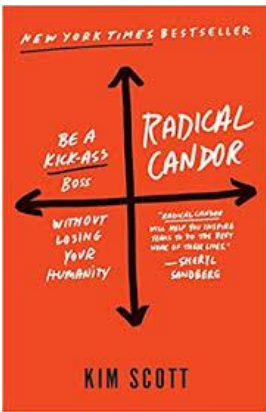- For Corporate Outreach, lead any CC-supported employment efforts, and lead the organization of job search and placement summits in cooperation with other SE-related organizations.

Book Report

Radical Candor: Be a Kick-Ass Boss Without Losing Your Humanity
By Kim Scott, 2017, 246 pages

This is a book I found out about while attending one of the largest international software engineering conferences, the 2017 Atlassian Summit. One of the Keynote Speakers at the conference was Kim Scott, co-founder and CEO of Candor, Inc., a company founded to help people have better relationships at work, and do the best work of their lives. Kim gave a very good 'TED Talk' type presentation at the Atlassian Summit, reviewing the main points in her book. The foundation of her very readable and useful book, is her "Radical Candor 2x2 Framework", a way to guide interactions at work, and help gauge feedback—praise and criticism.

From the book and the Radical Candor website (https://www.radicalcandor.com/about-radical-candor/):

Radical Candor™: The ability to Challenge Directly, and show you Care Personally.

Obnoxious Aggression™: What happens when you challenge, but don't care. Praise that doesn't feel sincere, or criticism that isn't delivered kindly.

Ruinous Empathy™: What happens when you care, but don't challenge. Praise that isn't specific enough to help the person understand what was good, or criticism that is sugarcoated and unclear.

Manipulative Insincerity™: What happens when you neither care or challenge. Praise that is non-specific and insincere, or criticism that is neither clear or kind.

One of the main reasons Kim was asked to talk at the Atlassian Summit, was the perceived value of her book's advice and guidance for supervisors and managers of what is a rapidly growing number of software engineering Millennials. According to Scott, millennials often feel empowered and opinionated, they are curious and ambitious, and many of them want to receive and give feedback. Her book seeks to help managers and leaders in handling feedback with millennials, as well as what millennials should do with regards to candor and feedback when first building a relationship with their bosses. I expect this book to become a handy and relevant reference for another set of very important systems engineering 'soft skills'.

New INCOSE "Systems and Software Interface Working Group (SaSIWG)"

A new INCOSE Working Group has been formally established, with the primary objective of helping Systems Engineers address the rapidly emerging area of Systems and Software Interfaces. The SaSIWG is Chaired by Dr. Sarah Sheard, Ph.D., INCOSE member and Principal Engineer at the Carnegie Mellon University (CMU) Software Engineering Institute (SEI). The SaSIWG was first discussed at the INCOSE 2017 International Workshop (IW17) and its formulation was the subject of another working session at the INCOSE 2017 International Symposium (IS17).

Since then the SaSIWG has held three more online meetings, and a fourth online meeting is scheduled during the final week of this month. The Purpose of the new INCOSE SaSIWG is to understand, clarify, and work to resolve issues with systems-software interfaces that challenge our ability to engineer systems today and tomorrow. These interfaces include physical, logical, data, and human aspects.

Near-term SaSIWG goals include determining a preliminary list of systems-software interface issues and collaborating with other INCOSE working groups to develop products such as a gap analysis between guidance put forth in the INCOSE Handbook/Systems Engineering Body of Knowledge (SEBoK) and the Software Engineering Body of Knowledge (SWEBoK).

Anyone wishing to learn more about the Systems and Software Interface Working Group (SaSIWG), can visit its new INCOSE CONNECT web site, where they can read the Draft Charter and get SaSIWG Contact information.

Membership Arena

**Mark Kaczmarek
Membership
Director**

INCOSE membership is over 12,000 world-wide. The Chesapeake Chapter of INCOSE serves the systems engineering community in Baltimore and its surrounding areas. Our Chapter is very active and prides itself in the many endeavors it has undertaken. An organization such as ours relies on the willingness of its membership to put as much effort into it as they receive in return.

Chesapeake Chapter's membership Includes:
- Current membership = 317
- Certification = 153
  - ASEPs = 34
  - CSEPs = 87
  - ESEPs = 32

Learn more about the *benefits of joining INCOSE* and consider being part of this thriving organization and fill out an *INCOSE Membership Application* today!

The Chesapeake Chapter proudly welcomes our new members:

September 2017
- *Ellis, John*, Leidos
- *Ha, Bao*, Northrop Grumman
- *Gentry, Bradley*, Odyssey Consulting, Inc.

August 2017
- *Abernathy, Mark*, Space Telescope Science Institute
- *Dorsman, Theo*, Northrop Grumman
- *Luke, Robert*, WGS Systems
- *Parsons, Christopher*, Northrop Grumman
- *Phan, Nam*, Booz Allen Hamilton
- *Rowe, Roger*, Northrop Grumman

July 2017
- *Alston, Felix, Dynane*
- *Hiteshew, Brian, Northrop Grumman*

June 2017
- *Adams, Mark*, SAIC
- *James, Corrie*, JHU/APL
- *Martin, Robin*
- *Stephenson, Tenee*, JHU/APL

May 2017
- *Hanni, Robert*, University of Maryland
- *Kight, Steven*
- *Land, Peter*, DOD, Systems Security Concepts

April 2017
- *Abbott, Steve*, DOD
- *Dougan, Thomas*, Northrop Grumman
- *Evans, Paul*, Student
- *Glennan, Andrew*, Northrop Grumman
- *Marshall, James*, Northrop Grumman
- *Paulov, Michael,* AASKI Technology, Inc
- *Pierce, Cliff*, Johns Hopkins University
- *Shields, Rebecca*, Student at University of Maryland, Baltimore County

Congratulations to Newly Certified SEPs since August 2017:
- *Cheresnowsky, Harry, CSEP* – Cyber Pack Ventures
- *Handy, Kristen, CSEP* - Booz Allen Hamilton
- *Marshall, James, ASEP* - Northrop Grumman
- *Miller, Kim, ASEP* - Northrop Grumman
- *Partenheimer, Janice, ESEP* – Engility

reStart Hiring & Networking Events:

Tuesday, October 24th – Tyson's Corner, VA
Monday, October 30th – BWI, MD

AN ACTIVE SECURITY CLEARANCE IS REQUIRED FOR THESE EVENTS

Event Information & Registration:

www.reStartEvents.com

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International Council on Systems Engineering

Applying UPDM 2 with MagicDraw
Taught by No Magic
February 5-9, 2018
8:00am - 5:00pm

Description: Applying UPDM 2/DODAF/MODAF with MagicDraw is a 5 day course for Unified Profile for DoDAF and MODAF (UPDM 2). The course focuses on implementation of UPDM 2 using core MagicDraw functionality and the MagicDraw UPDM 2 plug-in.

Course: This comprehensive course will help students to quickly improve planning and implementation of complex systems using UPDM 2 standards and the MagicDraw UPDM 2 plug-in. The training approach used assumes that many students have a basic understanding of DoDAF or MODAF and an understanding of how to describe an architecture. This course covers UPDM 2 in terms of the following architectural frameworks: DoDAF 1.0, DoDAF 1.5, DoDAF 2.0 (DM2) and MODAF 1.2 (M3).

- Contains lectures and hands-on practice on using UPDM2 for architecture development

- Includes information on how to build complete and integrated architectures; Presents UPDM 2 and related standards

- UML 2, SoAML, and SysML where they apply to UPDM 2

- Shows how to implement and customize the DoD Architecture Framework; Covers complete UPDM 2 Models and Views.

- Presents a concise case study.

Course Materials: Students will receive printed course materials and a Magic Draw 30 day license key. Students must bring a laptop computer to use during the course.

Continental Breakfast, lunch, and snacks are included.

Cost: $1800. Register by January 22. Maximum number of participants is 15, so be sure to register early! To pay by credit card or PayPal, visit our registration webpage for details: incose-cc.org/registration/.

Location:
Johns Hopkins University
Applied Physics Laboratory
Building 200
11101 John Hopkins Road
Laurel, MD 20723

This Newsletter serves 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 end up in a future issue of our Newsletter.

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 Chapter Website
www.incose-cc.org
For any comments or suggestions about this newsletter please e-mail our communications team
communications@incose-cc.org. We value your feedback.

2017 Board of Director Officers

- President: Michael Pafford
- Past President: EleanoraAnn "Ellie" Gianni, ESEP
- President-Elect: Dr. Grace Crowder, ASEP
- Treasurer: Tony Gigioli, CSEP
- Secretary: Craig Tyler, ESEP
- Programs: Gundars Osvalds, ESEP
- Communications: Myra Parsons Gross, ESEP
- Membership: Mark Kaczmarek, ASEP

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