

INCOSE Chesapeake Chapter International Council on Systems Engineering

E-Newsletter

July 2014

• Back Issues Forward to Friend

President's Point of View

Fireworks and Frankfurters



Mr. Erik DeVito - INCOSE CC President erik.devito@incose.org

I want to open this month by wishing everyone a Happy 4th of July!!! It's that time of year for Fireworks and frankfurters as we celebrate the great milestone of our nation's independence. If you haven't been able to take a vacation yet this summer, a long weekend might be a nice respite. I know for sure that it gets harder to bear the daily grind when the weather outside gets really nice. Of course, once you step outside that 90+ degree heat hits you right in the face. Then you have to drive for a couple of miles with the windows down until your A/C kicks in and it's right then you start to wish you stayed in the confines of your climate controlled

office. However, 90 degrees in Maryland in nothing compared to the temperatures our friends are encountering in Las Vegas. During the INCOSE IS the daytime temperatures have been soaring up to as high as 112 degrees. What's the old saying??? "It's a dry heat".

Similar to the weather outside things are really heating up within the chapter. As I promised last month, I have a lot to talk about. For July, we have a really top notch tutorial, a great dinner lecture, and the Chesapeake Chapter's Women in Systems Engineering (WISE) Initiative will be celebrating two firsts. They'll be holding their first election and their first event.

The tutorial we have planned – "Systems Architecting – A Strategy and Decision Perspective" – will be held on Saturday, July 12th from 9:00AM to 3:00PM. Leading this tutorial is none-other than Dr. Mark Maier of the Aerospace Corporation. Many of you may know him from the famous book on the subject that he co-authored with Dr. Eberhardt Rechtin, "The Art of Systems Architecting". Among other things, Dr. Maier's tutorial will clarify approaches to architecting through separating decisions and descriptions and identifying approaches to formulating architecturally relevant decisions even in situations of

In Vol. 5 Issue 7

- President's POV
- July System **Architecting Tutorial**
- July Dinner/Lecture
- August Dinner/Lecture
- **Upcoming Events**

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.



The Chesapeake Chapter is always looking for volunteers to speak at our upcoming meetings! Please contact our 2014 Programs Director, Dr. Alex Pavlak, if you would like the opportunity to speak or can recommend someone.

high complexity and ambiguity. Make sure you sign up soon. When Dr. Maier comes to town he's usually a big draw. To register click here.

On July 16th, our "3rd Wednesday" Dinner Lecture, we will feature Mr. Michael "Bo" Gourley, a Principal Project Engineer with Lockheed Martin. Bo will be providing us Systems Engineers with very timely information as it pertains to Performance Based Logistics (PBL). As a lifecycle product support strategy, PBL is becoming preferred and often required by DoD weapon system programs of record. Additionally, SEs should be mindful of this approach as the DAU has now included PBL as part of their curriculum for the career field. Remembering our lessons from the INCOSE Handbook, the creation of any system should include provisions for post-deployment support and sustainment. These are things that we need to start thinking about as early as CONOPs development. Bo spoke for us back in 2009 and his return is long overdue. He's one of the very few experts on this topic and we're extremely fortunate to have him. To register click here.

The Chesapeake Chapter WISE Initiative will be continuing their skyward trajectory by holding their first set of elections to determine their leadership and committee chairs. The scope of the WISE initiative is to develop a group within the INCOSE Chesapeake Chapter that offers a supportive and empowering environment for women in the systems engineering field to achieve their greatest potential. If you've read my previous newsletters where I've discussed this initiative, then you probably know that there are approximately 35 active WISE members. The Chesapeake Chapter Board of Directors approved the charter for this initiative back in May. By getting a leadership team in place they'll be better prepared to execute and become an important component of this chapter's future growth.

Additionally, on July 18th WISE will be holding their first event. The team didn't want to wait for the election to be completed before they hit the ground running with this. The focus of this daytime event will be on interns and new college hires from within various member companies in the area. The title of the event is "From the Classroom to the Boardroom: How to Successfully Navigate the Transition from College to Work". It will offer interns and recent grads the opportunity to network, learn about Systems Engineering, hear a panel discuss career options for interns and new grads, understand more about INCOSE Chesapeake and the WISE Initiative. Best of all, they will get to meet and ask questions with practicing engineers. This should be a lot of fun. Impressively the WISE members running this event have already received corporate sponsorship to help defray the costs. Also, Booz Allen Hamilton kindly agreed to host this event in one of their Annapolis Junction locations. If you're interested in helping out or attending this event please contact me. If you think your company may like to offer a \$250 sponsorship for this event please send an email to sponsor@incosecc.org with "WISE Event Sponsorship" in the subject line. They will respond with instructions on how to include your company.

Looking forward to the end of next month, on the 27th of August we'll be holding our annual 5th Annual SEP Dinner at the <u>Engineer's Club in Baltimore</u>. If you're an ASEP, CSEP, or ESEP you should be seeing an invite coming soon. This has always been a great event and we're proud of this year's line-up of speakers. We'll be hearing from David Long, President of INCOSE, Courtney Wright, SEP Program Manager, and a prominent Chief Systems Engineer from one of our local government customers. As always, we'll also present awards to any ESEP who

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:

Booz | Allen | Hamilton













earned their certification over the last 12 months. The venue is grand, the company is top notch, and we hope all of our Systems Engineering Professionals can make it out. Take a look at our past events-- 2013, 2012, 2011, 2010

Before I close this month I wanted to make a special note. Also being a member of the Armed Forces Communications and Electronics Association (AFCEA), I receive their "SIGNAL" magazine. This month as I was flipping through the notes on their worldwide chapter happenings and events, I saw the picture of someone I recognize quite well...longtime member of our chapter, Zane Scott of Vitech. Apparently Zane is a traitor...how dare he speak for another professional organization!!! HAHAHA!!! Just kidding!!! No really it's quite the opposite. See Mr. Scott was doing us and INCOSE a dutiful service by being a skillful representative of the Systems Engineering career field. The note was from the March meeting of the Scott-St. Louis Chapter and Zane was discussing the advantages of using model-based systems engineering methodologies for organizational improvement and its application to STEM and public policy. Great Job Zane!!! If you want to take a look go here.

Next month we'll discuss the INCOSE International Symposium and tell you about some of the exciting happenings. Additionally, our focus on the upcoming Chesapeake Chapter Board of Directors election and the Systems Engineer of the Year award will be sharpened. In the meantime, if you have anyone in that you'd like to nominate for the SEY please contact the INCOSE Chesapeake Chapter's current Past President by email william.ewald@incose.org

I'm always interested to hear from our membership so please feel free to contact me by email erik.devito@incose.org

Regards.

Erik DeVito - INCOSE Chesapeake Chapter President

Return to top

12 July, 2014, (9:00 AM - 3:00 PM - Saturday): Systems Architecting: A Strategy and Decisions Perspective



Dr. Mark Maier, The Aerospace Corporation, Distinguished Engineer

Presentation: Systems Architecting generally comprises the technical activities associated with problem selection, concept formation (integrated technical and programmatic), and validation. As such it is deeply linked to organizational strategy and decision making. This tutorial will present, through a series of case studies, analytical and heuristic approaches to understanding how to formulate problems in a strategic context, identify large scale technical and programmatic decisions, formulate decision criteria, and synthesize solutions in multiple views. It will clarify approaches to architecting through separating decisions and descriptions and identifying approaches to formulating architecturally relevant decisions even in situations of high

complexity and ambiguity. Case studies will be drawn from a wide range of systems.

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 may wind up in a future issue of our Newsletter.

Return to top.

Bio: Dr. Mark W. Maier is an author and practitioner of systems architecting, the art and science of creating complex systems. He is co-author, with Dr. Eberhardt Rechtin, of The Art of Systems Architecting, Third Edition, CRC Press, the mostly widely used textbook on systems architecting. He has also authored more than 50 papers on systems engineering, architecting, and sensor analysis. Since 1998 he has been employed by The Aerospace Corporation, a non-profit corporation that operates a Federally Funded Research and Development Center with oversight responsibility for the U.S. National Security Space Program, where he holds the position of Distinguished Engineer.

Go to www.incose-cc.org/registration/ to register

Return to top

16 July, 2014 (6:00 - 8:00 PM): Performance-based Logistics for the Systems Engineer



Mr. Michael
Gourley,
Principal
Project
Engineer,
Lockheed
Martin,
Corporate
Engineering,
Technology, and
Operations

Presentation: Aerospace & Defense systems require solutions that have been developed with System Operational Effectiveness (SOE) in mind. In order for them to achieve SOE goals, systems must be well designed, well built, well supported, and affordable for the duration of their respective lifecycles. The Department of Defense has recently reemphasized that Performance Based Logistics (PBL) is its preferred, and sometimes mandated, lifecycle product support strategy. In its Better Buying Power Initiative (BBPi 2.0), inclusion of PBL in the Defense Acquisition University training for Systems Engineers is being required and is being implemented. This presentation will highlight the importance of PBL to the Systems Engineering process.

Bio: Mr. Michael Gourley is a Principal Project Engineer for Lockheed Martin Corporate Engineering, Technology, and Operations (CETO) in Fairfax, Virginia. He provides Logistics and Sustainment performance support across all Lockheed Martin business units and serves as the Logistics and Sustainment Training Council Chairman. He was

initially a part of its Center for Performance Excellence as a Logistics Engineering Principal. He holds an MBA in Industrial Management, is a member of the Council of Logistics Engineering Professionals (CLEP), has received the Demonstrated Master Logistician (DML) designation from the International Society of Logistics (SOLE), is DAWIA certified in Logistics and Program Management, earned the Supply Chain Management Executive Certificate from Michigan State University, and is a member of the DoD Acquisition Corps.

>>Check out the Event Flyer Here<<

Go to www.incose-cc.org/registration/ to register

Return to top

20 August, 2014 (6:00 - 8:00 PM): Engineering Design: Insights into Highway Bridge and Tunnel Disasters



The Honorable Earl F. Weener, Ph.D, NTSB

Presentation: The National Transportation Safety Board, NTSB, is charged with determining the probable cause of transportation accidents, including surface transportation accidents. On August 1st, 2007 the collapse of a bridge on the I-35 Interstate highway in Minneapolis, MN, resulted in thirteen fatalities and injuries to 145 people. On July 10th, 2006 in Boston, MA, a section of suspended concrete ceiling panels in the Interstate 90 (I-90) connector tunnel en-route to Logan Airport fell, crushing a vehicle and killing a passenger. The investigations of these two accidents by the NTSB will be discussed with particular emphasis on how engineering errors contributed to the accidents.

Bio: The Honorable Earl F. Weener, Ph.D. is the 41st Member of the National Transportation Safety Board (NTSB). He was nominated by President Obama and confirmed by the U.S. Senate for a term that expires in December, 2015. Prior to serving as a member of NTSB, Dr. Weener was at the Boeing Company for 24 years. While there he held a series of Chief Engineer positions, focusing on Systems Engineering, Reliability and Maintainability, Safety, and Airworthiness. He was also involved with the development of the two-crew 747 flight deck concept and the development of the 757/767 flight decks.

>>Check out the Event Flyer Here<<

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Return to top

5th Annual Maryland SEP Gala, 27 Aug 2014, Wednesday

All Maryland SEPs and a guest are invited to celebrate their accomplishments and to honor new ESEPs at The Engineers Club, Baltimore MD. Last year's 4th Annual Gala was a great <u>success</u>. Save the date: **August 27th**

Upcoming Events and Announcements

- **July 12th** Tutorial (Saturday 9:00 3:00): Systems Architecting: A Strategy and Decisions Perspective *Dr. Mark Maier, The Aerospace Corporation, Distinguished Engineer*
- **July 16th** Dinner/Lecture: Performance-based Logistics for the Systems EngineerMr. Michael Gourley, Principal Project Engineer, Lockheed Martin, Corporate Engineering, Technology, and Operations
- August 20th Dinner/Lecture: Engineering Design: Insights into Highway Bridge and Tunnel Disasters
- August 27th 5th Annual Maryland SEP Gala

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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 President, Erik R. DeVito or our Communications Director, Oren Eisner. We value your feedback.

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Please use the Forward email link below so we can invite your friends to join our mailing list. Thanks in advance.

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