

INTERNATIONAL COUNCIL OF SYSTEMS ENGINEERING

CENTRAL VIRGINIA CHAPTER

www.incose.org/central-virginia
Sep 2017

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Cordially invites you to attend a dinner and presentation by:

Dale W. Sisson, Jr., P.E. (SSTM)

**Deputy Technical Director
Naval Surface Warfare Center, Dahlgren Division**

Topic:

The Duality of Technical Rigor

At:

Park Lane Tavern

**Spotsylvania Towne Centre, 1 Towne Centre Boulevard, Fredericksburg, VA
(see later map)**

Monday, 25 September 2017

Times: Social (Cash Bar)	1800	(Everyone Welcome)	
Dinner	1830	Charge: INCOSE Members:	\$14.00
		Non-Members:	\$16.00
Presentation	1930	Students:	\$10.00

Menu: A variety of dinner choices are available for the given price: Boddington's Fish & Chips, Makers Mark Bourbon Chicken, Bangers & Mash, Chicken & Chips, Shepherd's Pie, Crab & Balsamic Portabellas, London Broil and Park Lane Salad with the option to add Steak, Grilled Chicken, Ahi Tuna, Shrimp, or Salmon. (note - salad has bacon) and one coffee, tea or soft beverage.

Price: The cost for members is \$14 including 9% tax and 18% tip. The cost for a nonmember or guest is \$16. Full time students will be charged the reduced rate of \$10.

Contact: Rebecca Kreider, (202) 433-7129 (O), email rebeccakreider83@gmail.com or Ajoy Muralidhar, (540) 653-6759(O), ajoy.muralidhar@gmail.com to make your reservation.

We ask you to help us out by reserving early. You can always cancel later if things change so you cannot make it. Please come out and support this event so that the Chapter can continue to hold meetings in Fredericksburg on occasion. Thank you.

Topic: The word "technical" means many things to many people. In Research and Development (R&D) organizations, a premium is placed on being "technical" or conducting "technical work". While generally understood from a common sense perspective, this concept is ripe with a level of ambiguity that leads to ineffective communications, a lack of common understanding across the organization about what it takes to deliver an R&D organization's products, and, ultimately, inferior products that threaten an organization's business position. This talk will address the briefer's concept of "The Duality of Technical Rigor" and the importance of combining subject matter expertise with systems engineering discipline for successful product delivery. The briefer will describe this concept from his perspective as a technical leader in the Naval Research & Development Establishment.

Business Meeting: A short INCOSE business meeting will be held after the presentation to discuss and update on Chapter initiatives and business.



The Speaker: Mr. Dale Sisson assumed the duties of Deputy Technical Director of the Naval Surface Warfare Center Dahlgren Division (NSWCDD) in August 2016. In this role, Mr. Sisson leads the planning and execution of the Dahlgren Division's technical mission of research, development, test,

and evaluation for warfare systems development and integration. His responsibilities include directing a workforce of over 4000 employees and overseeing annual operations of \$1.5 billion.

Mr. Sisson previously served as Head of the Electromagnetic & Sensor Systems Department (B) at NSWCDD. It was in this role that Mr. Sisson was promoted to the executive ranks as a Senior Scientific Technical Manager (SSTM). As B Department Head, Mr. Sisson led a department of over 550 government personnel and was responsible for NSWCDD's efforts in the areas of Directed Energy; Chemical, Biological, Radiological (CBR) Defense; Electronic Warfare; Radars & Sensors; and, Electromagnetic Environmental Effects (E3).

From April 2015 to April 2016, Mr. Sisson spent a year as Director of Systems Engineering on the staff of the Deputy Assistant Secretary of the Navy for Research, Development, Test, & Evaluation (DASN (RDT&E)). In this capacity, Mr. Sisson was charged with ensuring the application of systems engineering discipline across Department of the Navy acquisition efforts, fostering technical capability within the Naval Research & Development Establishment (NR&DE), and executing the functions of the Department of the Navy's Chief Systems Engineer.

Mr. Sisson received his B.S. in Mechanical Engineering and M.S. in Systems Engineering from Virginia Tech in 1992 and 2003, respectively. He is currently pursuing a PhD in Engineering Management and Systems Engineering from Old Dominion University, is a Graduate of the Federal Executive Institute, and has been a Licensed Professional Engineer in the Commonwealth of Virginia since 1998. Mr. Sisson was awarded the Department of the Navy's Superior Civilian Service medal in May 2015.

Believing strongly in serving his community, Mr. Sisson is Chairman of the King George Family YMCA Board of Directors, a member of the Rappahannock Area YMCA Board of Directors, and a Sunday school teacher. For three terms, Mr. Sisson held elected office as the At-Large member of the King George County Board of Supervisors; he is a prior member and past Chairman of the George Washington Regional Commission Board of Directors; and, a prior member of the Board of Directors of the Fredericksburg Regional Military Affairs Council.

Mr. Sisson's career highlights include a diverse set of leadership opportunities across NSWCDD. Beginning his career as a Mechanical Engineer in the Chemical, Biological, & Radiological Defense Division, Mr. Sisson has served as a Branch Head, Division Head, Deputy Department Head, Department Head, and, now, the Deputy Technical Director. Prior to joining NSWCDD, he spent 5 years in industry with experience as a Product Engineer with The Torrington Company in Clinton, SC and as a Design Engineer with Walter Grinders in Fredericksburg, VA..

President's Corner: Thank you to everyone who participates in our INCOSE Central VA Chapter events. INCOSE Central VA is one way all of us can connect to not only advance our individual practice of Systems Engineering and also benefit the community through outreach in STEM activities. Please join us at our next meeting as we hear from Mr. Dale Sisson, the Deputy Technical Director of NSWCDD. NSWC Dahlgren is in the process of reviewing and streamlining all their internal technical practices to ensure that policy, processes and metrics are aligned to ensure the best outcome for our Navy, USMC and other sponsors and ultimately, the warfighter. To this end, the Technical Director's Office is working very closely with the NSWCDD Chief Engineer, his staff and with the Department Chief Engineers to develop project execution and review guidance and metrics. Mr. Sisson will share his insights on the factors that enable successful S&T and Research & Development in a resource constrained environment.

If you have a topic you'd like to see addressed at a future meeting, please contact me or any of the other Officers and Directors.

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization founded in 1990. Our mission is to advance the state of the art and practice of systems engineering in industry, academia, and government by promoting interdisciplinary, scalable approaches to produce technologically appropriate solutions that meet societal needs.

Want to get more involved? The Chapter is looking for people who want to do more for the Chapter. There are Chapter committee positions that need people to fill them. There are Chapter positions suited for those who can make small or large commitments. Contact the Chapter President for information or attend one of the regularly scheduled Dinner or Executive Committee meetings.

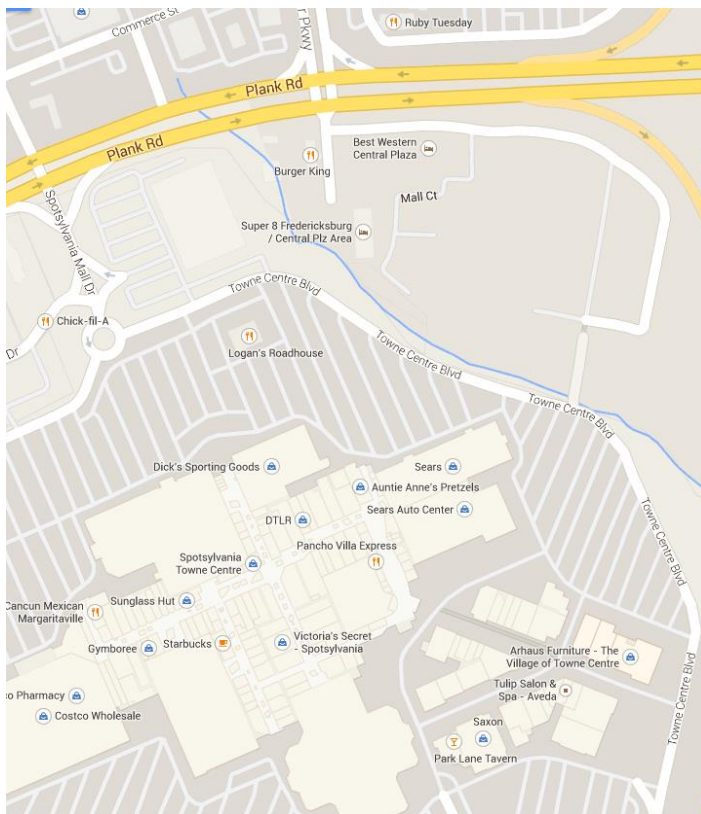
To get information on leadership responsibilities go to the Central Virginia Chapter website to view the Bylaws and Constitution, <http://www.incose.org/central-virginia/>.

Order Coffee Cups with Chapter Logo: The Chapter will have some coffee cups with the new Chapter logo imprinted on them for mementos for our meeting speakers and for responding members, in the near future. If you would like us to include you on this order, contact Greg Buchanan (see front page). The approximate (at cost) price will be \$11 if you pick the cup at a meeting.

Interested In Becoming an INCOSE Member?

If you would like more information about the international Council of Systems Engineers (INCOSE) or you are interested in obtaining information about becoming a member, please contact any of the members of the Executive Committee of the Central Virginia Chapter. Their names and contact information are listed in the “letterhead” located on the first page.

Map to Park Lane Tavern: Get off Interstate 95 at Exit 138 and go west on Route 3 (Plank Road) and turn left into Spotsylvania Towne Centre Mall. At roundabout go left on Towne Centre Blvd and follow it around to the back of the Mall where one turns right to get to the restaurant as shown on map.



From the Desk of the Editor: If you are not on our Chapter’s newsletter emailing list, please send me an email and I will make sure to get your name on the list. You will

then get all future newsletter and meeting announcements. My contact info is on front page.

Again, I want to remind the membership of the efforts that go into organizing a meeting and the efforts of the speaker to prepare his/her presentation. These dinner meetings can only continue with your support. The Officers of the Chapter will continue to arrange excellent programs and the Chapter will continue to greatly subsidize the cost of the meal for all attendees.

I hope that you decide to support this engineering event, of which there are only a few per year. Also, I hope to meet you and get to know you.

Meeting and Events Schedule:

Future Meetings and Events:

Sep 25, 2017; Tues, 1800; Chapter Dinner Mtg; Loc: TBD, Fredericksburg; Spkr: Dale Sisson.; Topic: Technical Rigor; Coord: Ajoy Muralidhar & R. Kreider

Oct, 2017; 1800; Chapter Dinner Mtg; Loc: TBD, Fredericksburg; Spkr: TBD.; Topic: TBD; Coord: Ajoy Muralidhar & R. Kreider

Past Meetings and Events:

Jun 27, 2017; Tues, 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Del-Machelle Houchins.; Topic: Navy SYSCOM Approach to Mission Engineering and Integration and Interoperability; Coord: Ajoy Muralidhar & R. Kreider

Mar 29, 2017; Wed, 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Patrick Cantwell.; Topic: Systems Engineering Lessons Learned from Naval Railgun Development; Coord: R. Kreider

Oct 18, 2016; Tues, 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Vince Vendetti.; Topic: A Practical Approach to Rapid Prototyping Hardware ; Coord: G. Buchanan

Jun 27, 2016; Mon, 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern ; Spkr: Harry Deary.; Topic: Safety Engineering of Computational Cognitive Architectures within Safety-Critical Systems; Coord: G. Buchanan

Mar 15, 2016; Tues, 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Rescheduled Spkr: David F. Rico, Ph.D.; Topic: Lean & Agile Enterprise Frameworks: For Managing Large U.S. Government Cloud Computing Projects; Coord: G. Buchanan

Feb 9, 2016; Tues, 1800; Chapter Dinner Mtg; Loc: Pancho Villa, Dahlgren; Substitute Spkr: Eileen B. McConkie, PhD.; Topic: Why INCOSE and Why Central Virginia Chapter; Coord: G. Buchanan

Nov, 2015; Tues, 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern ; Spkr: Louis F. DeChiaro, Ph.D.; Topic:

LENR Phenomena and Potential Applications; Coord: J. Moreland and G. Buchanan

Oct 6, 2015; Tues 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Steve Anderson; Topic: Data Farming and the Exploration of Inter-agency, Inter-disciplinary, and International "What If?" Questions; Coord: J. Moreland and G. Buchanan

Sep 9, 2015; Wed 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Mike Mazzocco; Topic: Assessing Naval Operational Energy Usage Through A Mission Engineering Methodology; Coord: J. Moreland and G. Buchanan

Aug 11, 2015; 1800; **RESCHEDULED**; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Mike Mazzocco; Topic: Assessing Naval Operational Energy Usage Through A Mission Engineering Methodology; Coord: J. Moreland and G. Buchanan

June 8, 2015; 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Marty Westphal; Topic: Information and Communications Technology - Joint Staff J6 Perspective; Coord: J. Moreland and G. Buchanan

May 19, 2015; Tues 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: James E. Keener; Topic: Overcoming Challenges in System Engineering to Deliver a System of Systems Capability; Coord: J. Moreland and G. Buchanan

Apr 14, 2015; Tues 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern; Spkr: Bill Fournier; Topic: Requirements Verification; Coord: J. Moreland and G. Buchanan

Mar 10 2015; Tues. 1800;Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr: Nicholas S. Dunford; Topic: VICTORY Architecture Initiative and Application to USMC M-ATV; Coord: J. Moreland and G. Buchanan

Feb 10 2015; Tues. 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr: Dr. John Burrow; Topic: An Analysis Methodology to Establish and Evaluate Alternative Concepts for a New Small Surface Combatant Ship; Coord: Dr. Moreland