

INTERNATIONAL COUNCIL ON SYSTEMS ENGINEERING

CENTRAL VIRGINIA CHAPTER

Cordially invites you to attend a dinner and presentation by:

Michael L. Orr

Director of the Systems Engineering Directorate National Reconnaissance Office

Topic:

The Challenges and Victories of Transitioning to Digital Engineering

Park Lane Tavern

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

Wednesday, 23 February 2022

Times: Social (Cash Bar) 1800 (Everyone Welcome)
Dinner 1830 Charge: INCOSE & PMI Members: \$15.00
Non-Members: \$20.00
Presentation 1930 Students: \$12.00

Menu: A variety of dinner choices are available for the given price and one coffee, tea or soft beverage.

Price: The cost for members is \$15 including 9% tax and 18% tip. The cost for a nonmember or guest is \$20. Full time students will be charged the reduced rate of \$12.

Contact: Email: Anthony Sirico, (904) 307-7512, <u>Asirico0215@gmail.com</u> or. Eileen B. McConkie, PhD, (540) 845-3438, <u>eileenmc@gwmail.gwu.edu</u> 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.

Speaker: In August 2014, Michael Orr was assigned as the Director, System Engineering Directorate

Mr. Orr became a civilian employee of the NRO in March 2002. Since then he has been assigned a variety of positions ranging from project manager for the development of both ground and satellite systems, the Chief of Staff, Office of the Director, National Reconnaissance Office, and most recently as a Deputy Director for the Electro-Optical System Program Office.

Prior to becoming a NRO civilian employee, Mr. Orr served as an officer in the US Army. Over the course of his 20 year Army career he held positions as a platoon leader, company commander, and battalion operations officer with duty stations in both the United States and (continued)

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

www.incose.org/central-virginia Feb 2022

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The Speaker (contin'd:

Germany. His final assignment was as an acquisition officer responsible for the development systems for the national intelligence community. Mr. Orr received a Bachelor of Science degree from the United States Military Academy, and a Master of Science degree in Nuclear Engineering from A&M University.

Mr. Orr is originally from

Marianna, Florida. Today he resides in Burke, Virginia.

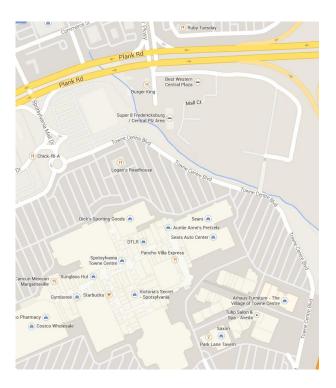
President's Corner: A meeting has been scheduled for Park Lane Tavern, Wednesday, February 23, 2022, social 1730, and Dinner to follow. Our meeting last November was a great success with a fascinating talk from Dr. Knight. His speech, The Art of NRO Systems Architecting, was inspiring, and I hope that he will do us the honor of speaking again.

This meeting is our first of 2022, and I want to kick this year off the right way. So our first speaker of the year is Mr. Michael Orr, Director of the Systems Engineering Directorate (SED) at the National Reconnaissance Office. I believe his long career and experience within the government would make for a great talk.

Not only is this our first meeting of '22, but this is also my first meeting as president. Although I do not know how I will follow in Rod's footsteps, he left some pretty big shoes to fill. On behalf of the INCOSE Central Virginia Chapter, I would like to thank Rod for his hard work and dedication to advancing our knowledge in the field of Systems Engineering. Though he will be missed, he is not going far, and we will continue to see Rod as he serves as a director. For those of you who are new or have yet to meet me, my name is Anthony Sirico from Culpeper. I have been serving in the Navy since 2004, starting as an Air Traffic Controller, then a Naval Aviator after graduating from the Naval Academy in 2011. I flew both the EP-3E ARIES II and the MQ-4C Triton and served tours at the Defense Threat Reduction Agency (DTRA) and now the National Reconnaissance Office (NRO). I have a B.S. in Astrophysics and an M.S. in Engineering Systems from the Naval Post Graduate School. I am currently working on my Ph.D. in Systems Engineering from Colorado State University, focusing my research on Geometric Deep Learning applications within SE.

I hope to serve the chapter well, and I look forward to another great year.

Map to Park Lane Tavern: Get off Interstate 95 at Exit 130 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.



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/.

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.

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 Anthont Sirico (see front page). The approximate (at cost) price will be \$13 if you pick the cup at a meeting.

9th Annual Stem Summit: The 9th annual STEM Summit was held on Feb 29, 2020, and was a huge success. I would like to thank David and Rebecca Kreider, Ajoy Muralidhar, John Maresco, Matt Iglesias, and Greg Buchannan for their assistance in manning the INCOSE booth and discussing career choices with the students. The next Summit may be held virtually.

POC: Dr. Gregory Chambers, gchambers426@msn.com.

Interested In Becoming an INCOSE Member?

If you would like more information about the international Council on Systems Engineering (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.

Science Fair Judges and Supporters: On March 4, 2020, the Chapter presented awards at the Virginia Piedmont Regional Science Fair (VPRSF).

The awards consisted of a certificate and check. The first place award was \$100, the second place was \$75 and third place award was \$50, along with Certificates. Dan Vavrick, Director and Science Fair Committee Chairman attended the Regional Fair as judge.

The Section plans on giving awards again to the Regional Science Fair on March 5 in Charlottesville and to the State Science fair.

If interested in volunteering or wish for more information on opportunities to participate in Science events, please contact Dan Vavrick or any INCOSE Officer.

The Piedmont Regional Science Fair Web site address is http://www.vprsf.org/register.htm to sign up to be a judge, The 2022 Virginia State web site is http://www.vssef.org.

.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 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 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:

Feb 23 2022, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; Michael L. Orr.; Topic: The Challenges and Victories of Transitioning to Digital Engineering; Coord: Anthony Sirico

TBD, **2022**, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; TBD; Coord: Anthony Sirico

Past Meetings and Events:

Nov 30 2021, 1730: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; Byron Knight, PhD.; Topic: The Art of NRO Systems Architecting; Coord: Greg Chambers, PhD

Oct 13 2021, 1730: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; David Maurer, LTC; Topic: The Cuban Missile Crisis 1962; In Extremis Project Management; Coord: Greg Chambers, PhD

Aug 18, 2021, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; Anthony Sirico; Topic: Machine Learning Techniques for Systems Engineering; Coord: Rod Cutright

Jun 23, 2021, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; Eileen B. McConkie; Topic: Mathematical Proterties of System Readiness Levels; Coord: Rod Cutright

Jan 15, 2020, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; Gordon J. Gattie; Topic: What Were You Thinking? Investigating Human Judgement Through Probabilistic Functionalism; Coord: Eileen B. McConkie

May, 21 2019, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; TBD; Topic: A General Theory of System Safety; Coord: Alan Brown

Mar 26, 2019, 1800: Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr.; George Meadows; Topic: From Virtual to Physical and Back Again: 3D printing and Augmented Reality; Coord: G Chambers

Feb 19, 2019; 1800; Chapter Dinner Mtg; Loc: Park Lane Tavern, Fredericksburg; Spkr: Gil Goddin.; Topic: Complex System of Systems Control Hierarchy; Coord: Ajoy Muralidhar

Ajoy Muralidhar