January General Membership Meeting

HOW MUCH AUTONOMY IS ENOUGH?

Applying Systems Engineering Methodology to Autonomy in Modern Systems

Author: John Hearing – Instructor for the Center for Technology and Management Education at Caltech; an adjunct Professor for the U.S. Naval War College; and a volunteer Wilderness Ranger with the U.S. Forest Service.

Mr. Hearing is the holder of 4 patents and author of a wide variety of articles on systems engineering and military topics. He resides in Maple Valley, WA.

Many have labelled the future as "Autonomous"— INCOSE predicts that Systems Engineering will involve autonomy in many forms. Many companies are moving to capture the new autonomy marketspace, but is this all a good thing? The ultimate question: Is every place appropriate for autonomy?

John will discuss the application of systems engineering to determine whether an autonomous solution is necessary, needed, appropriate and worth the risk before being embraced.

The General Membership meeting will be **in-person.** You have the option to attend virtually or join us in person at Cascadia Pizza.

Date: Wednesday, 1/10/24, 5:45PM

Agenda: See meeting details on next page

Contact: Kyle Zienin – kyle.zienin@incose.net

September General Membership Meeting

Dear Members, Friends, & Colleagues, please join us for our <u>In-Person meeting</u>:

HOW MUCH AUTONOMY IS ENOUGH?

Applying Systems Engineering Methodology to Autonomy in Modern Systems

Presenter: John Hearing has a long history of applying Systems Engineering to a wide variety of problems in a number of different fields, ranging from development of new Commercial Airplanes to creating and fielding of small unmanned vehicles engineering new methods of communication. A native of Washington State and graduate of University of Washington, he was commissioned into the U.S. Navy in 1980 and served on a variety of ships before shifting to the Intelligence field. His experiences with the challenges of providing intelligence support afloat led him to the Naval Postgraduate School, Monterey, CA, where he majored in Space Systems Operations. His thesis outlined creative solutions to solving naval wideband communications challenges and led to his assignment to the staff of the Chief of Naval Operations and his appointment as the project manager to turn his thesis into a real system. The result, known as Project CHALLENGE ATHENA, provided a 20x increase in naval communications capability to major naval ships.

Mr. Hearing retired from the Navy in 2000 and joined The Boeing Company, where he was part of the System of Systems Architectures group, Boeing Defense Systems (BDS), and Boeing Commercial Airplanes (BCA). In Phantom Works and BDS, he led a variety of projects ranging from software development for intelligence resource allocation; software to assist with military planning of operations; development of embedded software for controlling UAVs from airborne aircraft; and development of intelligence-collection versions of commercial airplanes. He led efforts at BCA for establishing a Safety Lessons Learned database, creation of a Systems Engineering Playbook, establishment of a Systems Engineering University, and spearheaded a corporate-wide approach to Root Cause Corrective Action (RCCA). He retired from Boeing in 2018.

Agenda: Wednesday January 10, 2024

- 5:45 -- 6:00 In-person meet & greet, order food, etc.
- 6:00 -- 6:05 Virtual meeting Log-in
- 6:05 -- 6:10 Networking-Introductions
- 6:10 -- 6:20 INCOSE-SMC President's Message
- 6:20 – 6:30 Installation of New Officers & Directors
- 6:30 -- 7:30 Guest Speaker Presentation and Q&A

NOTE: To take full advantage of the time allotted for networking, please be on time for introductions and announcements.

In-Person meeting: Cascadia Pizza Co., 1820 130th Ave NE, Bellevue, WA 98005

Virtual:

To join the meeting follow the zoom link at: ZOOM Link - SMC January General Meeting
Zoom Meeting ID: 892 6037 9649   Zoom Passcode: 343882

Cost:

Free for the Wednesday membership meeting. Please RSVP by contacting Kyle Zienin – kyle.zienin@incose.net in case we have updated announcements to make.