"How to Kill Your Company: Cyber Security Engineering for National Defense, Water Utilities, and Grid Utilities"

Andrew Bochman

Senior Grid Strategist for Idaho National Laboratory National and Homeland Security directorate

Andrew Ohrt, P.E.

Resilience Practice Area Lead at West Yost Associates, Duluth, MN

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2:00 – 3:00 p.m. Olin 202
Reception in Olin 204 3:00 – 3:30 p.m.

Abstract: In this presentation, we'll introduce the concepts associated with Consequence-driven, Cyber-informed Engineering (CCE). Developed by Idaho National Laboratory (INL), one of the US Department of Energy's 17 national laboratories, and currently being deployed by critical infrastructure owners around the country, CCE is a ground-breaking approach to designing and securing more resilient physical systems. These days every piece of the equipment we use to run our world is designed in software and is operated in an increasingly automated or even fully automated fashion on complex software over digital networks. When intruders take over control of our most critical processes or manipulate the data on which they depend, many organizations' ability to "operate through" attacks is quite limited. INL partner West Yost is tuning the methodology to better secure water and wastewater operations, and we'll be happy to discuss applications to other industrial sectors as well.

Andrew Bochman provides strategic guidance on topics at the intersection of grid security and infrastructure resilience to senior U.S. and international government and industry leaders. A Non-Resident Senior Fellow at the Atlantic Council's Global Energy Center, in early 2021 Bochman published his first book: Countering Cyber Sabotage: Introducing Consequence-based Cyber-Informed Engineering. Bochman began his career as a comms officer in the US Air Force, and prior to joining INL was the Energy Security Lead at IBM, received a BS degree from the U.S. Air Force Academy and an MA from Harvard University.

Andrew Ohrt, P.E. is the Resilience Practice Area Lead for West Yost Associates. Since 2019 Ohrt has led the development of AWWA's cybersecurity resources and training. Ohrt serves on the Department of Homeland Security's Control Systems Work Group, supporting the development of control system cybersecurity performance goals for the U.S. and the Water Sector. Ohrt and West Yost are partnered with Idaho National Laboratory to bring leading cross-sector cybersecurity practices to the Water Sector.

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