The Evolution of the NAVY Industrial Control System Security Measures

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Guest Lecturer Jeffrey Johnson
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Abstract:
The rapid emergence of cyber incidents on critical Industrial Control Systems (ICS) with the potential to debilitate our installations’ mission critical assets has catalyzed the need to establish a defensive cybersecurity posture across the shore enterprise. To that end, the Shore is developing processes for formal communication, guidance, and direction to our shore establishment for the planning, prioritization, and utilization of limited resources to accomplish this large and continuous task. The shore will have short term guidance which covers the preliminary focus areas as well as longer-term issues which will require additional effort to address. As threats, policies, priorities, and resources change and evolve, follow-on policy and processes will ensue.

During his presentation, Mr. Johnson will describe the evolution of the NAVY ICS concept, with the focus on cyber security and command and control of the Navy Shore Operational Technology environment. Mr. Johnson will discuss lessons learned as the NAVY Smart Grid pilot site, and the transition from a pilot site to the current NAVY control system architecture. Mr. Johnson will also address one Region’s approach to Command and Control, leveraging the Shore Operation Technology to provide Integrated Command and Control for its mission.

Biography:
Mr. Jeffrey M. Johnson has worked as a civilian in various Public Works and Command positions in both the Army and the Navy. He is currently on detail to Commander Naval Installations Command as the Executive Agent for security of Control Systems for Navy Shore Sensor Systems. His regular position is the Regional Command Information Officer (N6) for Naval District Washington. He has worked with the Anti-Terrorism Force Protection (ATFP) program in support of the Systems Engineering IPT. He piloted several projects for the ATFP program, to include the Virtual Perimeter Monitoring System (VPMS) which is comprised of secure wireless networks, video management and video analytics systems. He was the co-lead for the NAVY Smart Grid Pilot project which leveraged the VPMS Network components, and includes secure middleware panels and software to bring disparate Building and Utility systems into a common, secure, and accredited architecture. He now works with the Public Works Department and the Operations department (N3) to implement the Smart Shore Initiative, which is a combination of people, process, and technologies to improve Shore and Energy operations in Naval District Washington.

The Naval District Washington Smart Grid Pilot systems are now being migrated to the Naval Utilities Monitoring and Control Systems architecture to support the Navy’s Enterprise standardization and deployment efforts, while maintaining the integrated networks, command and control, and cyber security aspects of the original Pilot project.

Mr. Johnson is a native of Orange County Virginia, graduated from Orange County High School, Orange, Virginia. He attended the Virginia Military Institute, earning a BS degree in Civil Engineering in 1980.