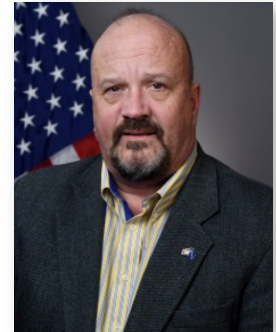


## US Navy Electrical Leap Forward...A Vision for the Future ONR Technology Development

2 November 2018 – ME Auditorium – 1300

### With Guest Lecturer Lynn Petersen, CAPT, USN (Ret)

Program Officer, Ship Systems and Engineering Research,  
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Lynn Petersen, CAPT, USN (Ret)

### Abstract

The Naval Research and Development (R&D) Framework provides the structure and guidance through which Navy R&D can be aligned, allocated and accelerated to our Navy and Marine Corps Warfighters. A balance of basic science to advanced research spanning academia, industry and government is needed to implement the Navy R&D Framework vision. ONR technology development is needed to meet the future Power and Energy demand of the Navy and Marine Corps. Navy S&T through large scale demonstration is necessary to de-risk technology through its maturation process. Technology development in power electronic devices, electromagnetism, education, adaptive controls, machinery controls, medium voltage direct current risk identification/mitigation, and silicon carbide (SiC), are just a few of the many power and energy research areas, but are all necessary and essential, and working in conjunction with other Navy agencies and other services to mature the technology, in meeting the Navy's power and energy requirements of the future.

### Biography

Mr. Petersen graduated from the United States Naval Academy, Annapolis, MD with a BS in Mathematics in 1986 and was commissioned an Ensign in the United States Navy. Selected for lateral transfer to the Engineering Duty Officer program, he received a MSME from the Naval Postgraduate School, Monterey, CA in 1994. Following Active Duty, he was employed by the Naval Surface Warfare Center, Carderock Division, Annapolis, MD as an Electrical Engineer. In May, 2006, he was hired by the Office of Naval Research (ONR), serving as the ONR S&T rep to the Electric Ships Office, PMS 320. In November, 2008, he was recalled to Active Duty with assignment as the Deputy Director, Electric Ships Office, PMS 320, assigned from 2008-2012. He was promoted to the rank of Captain in 2009, later retiring from the military in 2016 following 30 years of service in the Navy.

From 2012–2014, he was the Navy's Director for Systems Engineering in the Deputy Assistant Secretary of the Navy (DASN) office for Research, Development, Test and Evaluation (RDT&E).

Following his service at DASN (RDT&E), Mr. Petersen returned to ONR and serves as a Program Officer leading basic research in power electronics, electromagnetism, and adaptive controls and applied research in machinery controls, Silicon Carbide (SiC) Wide Bandgap (WBG) semiconductor applications and Medium Voltage Direct Current (MVDC) power distribution systems.

Married to Alena, they have two adult children. He is a member of IEEE, ASNE and the MRS. He and his wife are active in their church and singing.

