Energy Aware Acquisition, the Decision That Impacts Energy Supportability

Tuesday, May 17, 2022 | 12:00 PM Pacific Time | MAE Auditorium

Peter McCauley

Naval Surface Warfare Center Carderock

Abstract

This brief discusses the energy considerations that need to be made during Surface Ship design and acquisition. The discussion includes discussions on Energy Policy, Requirements Development, Design Development, and Post Delivery Test and Trials. The brief is intended to provide a basic understanding for what energy decision are made, and when they are made during the acquisition process. The decision will be discussed as two types; requirements decisions (Pre-MS A), and engineering decisions. For the requirements decision the types of analysis, and the metrics used in the requirements will be discusses. For the design decision the energy calculations, identification of major consumer, and operational considerations will be discussed. The brief will be concluded with a discussion on test and trials as the completion of the acquisition process.



Peter McCauley

Biography

Mr. McCauley is the Technical Warrant Holder for Machinery Integration at Naval Sea Systems Command. He Bachelor's degree is in Naval Engineering, and is finishing his master's degree in Systems Engineering Management at Naval Postgraduate School. He has worked for NAVSEA for over 10 years as a Naval Architect supporting surface ship engineering and design from pre Analysis of Alternatives to detailed design and construction. As the technical warrant holder for Machinery Integration he is responsible for propulsion system studies, design sizing of power and propulsion, energy conservation, and post-delivery performance and special trials. Mr. McCauley is currently the associate editor for the Naval Engineers Journal for Energy and Environmental System subjects.

