

Lithium Battery Management at Naval Postgraduate School

7 April 2017 – ME Lecture Hall – 1300

Mr. Scott Giles

NPS Research Safety Department
Safety Engineer
Laser System Safety Officer



Mr. Scott Giles

Abstract:

Lithium batteries have found many applications at the Naval Postgraduate School. A survey of the characteristics of this energy storage technology reveals why they are desired, but reveals safety concerns as well. The chemical agents and failure modes can be particularly hazardous. The Navy has a comprehensive Lithium Battery Safety Program that provides mitigation for many lithium battery system hazards, but it also may be encumbering in certain respects to the research environment.

Biography:

Scott Giles entered the Navy through NROTC University of Illinois-Urbana Champaign in 1993 after completing a BS in Mechanical Engineering. As a Stash Ensign, he was assigned to the Tomcat Fleet Replacement Squadron, VF-124 in Miramar, CA. Finishing flight school in Kingsville Texas, he enjoyed the nearly new T-45A as a stepping stone to the aging S-3B Viking. 16 years as a fleet pilot resulted in 700 carrier landings, 3000 flight hours, a year at Test Pilot School, and a tour as a Test Pilot. In 2005, Scott was selected for the Officer Scholarship Program, accepted to the Stanford University GPS lab, and earned an MS in Aerospace Engineering with a final project that simulated GPS based Navy carrier approaches. When the veritable S-3B Vikings were retired in 2009, Scott transferred to the acquisition community as an Aviation Engineering Duty Officer (AEDO). He procured GPS based carrier landing systems with PMA-213 and then procured T-45C aircraft with PMA 273. Retiring from active duty in 2013, Scott now follows his wife, CDR Kathleen Giles, on her continuing Navy adventures as a PhD student and PMP candidate professor at NPS. Scott currently works for the Research Safety Department as a Safety Engineer specializing in lasers and lithium batteries.

