

DEPARTMENT OF THE NAVY

NAVAL POSTGRADUATE SCHOOL 1 UNIVERSITY CIR MONTEREY, CA 93943-5000

IN REPLY REFER TO:

5100 Ser 00K/315 9 May 16

MEMORANDUM

From: President, Naval Postgraduate School

To: Naval Postgraduate School Safety and Lithium Battery Acquisition Specialists,

Managers, and End Users

Subj: PRIORITY OF NAVSEA AUTHORIZATION REQUEST LETTERS FOR

LITHIUM BATTERIES AND LITHIUM BATTERY SYSTEMS

Ref: (a) OPNAVINST 5100.23G

(b) NAVSEAINST 9310.1C 2015

(c) NAVSEA S9310-AQ-SAF-010 Second Revision

- 1. The safety of Naval Postgraduate School (NPS) personnel and its projects is paramount. NPS Lithium Battery Safety Program has made every effort with available resources to comply administratively and minimize risk with the NAVSEA guidance promulgated in references (a) and (b). Policy guidance detailed below is intended to best leverage finite resources by prioritizing resources to those lithium batteries and lithium battery systems that present the greatest hazard.
- 2. NPS has identified dozens of lithium battery systems that are progressing toward alignment with requirements, best practices and recommendations promulgated by reference (b) and detailed in reference (c), as well as manufacture's guidance where promulgated.
- 3. Chapter 3 of reference (c) lists specific requirements for various classes of lithium batteries and lithium battery systems. Some NPS lithium batteries and lithium battery systems qualify as "excepted" from testing, review, or approval by Technical Agents, Administrative Leads, or Technical Warrant Holders. Some are not. Those lithium batteries and lithium battery systems that are not excepted from testing, review, or approval often are batteries or systems that operate at higher power, contain higher energy, are larger size, contain more cells, reach higher voltages, or lack certification of national or international safety standards.
- 4. Some lithium batteries and lithium battery systems meet all the requirements specified in Section 3 of reference (c) for exception from testing, yet still require a <u>Formal Authorization</u> Request <u>Letter</u> from NAVSEA. These systems are:
 - a. "Small" Rechargeable Batteries: One battery, 1-2 cells, no more than 3 Ah per cell.
- b. Non-rechargeable Batteries: UL Listed, unmodified commercial off the shelf (COTS), 1-2 cells, no more than 3Ah per cell, or 9 volt PP3 size snap connector battery, designed for commercial use.

Subj: NAVSEA AUTHORIZATION REQUEST LETTERS FOR EXCEPTED LITHIUM BATTERIES AND LITHIUM BATTERY SYSTEMS

- c. Non-rechargeable: Specific Navy use, 1-2 cells, no more than 3Ah per cell, protected from other electric power by blocking diodes and resistors.
- 5. In order to manage risk and properly distribute efforts, NPS will first assign resources for Formal Authorization Request Letters to lithium batteries and lithium battery systems that fail to meet the exception criteria of Section 3 of reference (c). Once this is done NPS will then dedicate its efforts to the inherently safe lithium batteries and lithium battery systems that meet all the exception criteria of Section 3 of reference (c), yet only require the formal letter.

6. All NPS lithium batteries and lithium battery systems, whether meeting excepted criteria or not, are directed to submit all other required acquisition reports, and follow the remaining guidance of reference (b) and (c) for use, charging (if applicable), maintenance, storage, transportation, disposal, and manufacture's guidance.

A.J. COLÓN By direction