BUYING Lithium Batteries

***Flag ALL Li purchases for Safety Review

**Answer:** They pose a real hazard to ships, aircraft, submarines and people. The Navy has a Lithium Battery Control Program (NAVSEA 9310.1C and TECHMAN S9310-AQ-SAF-01 R2) that requires specific management, including acquisition requirements, to mitigate the potential risks associated with charging, storage, transport, use, and disposal. For Lithium Polymer (LiPo) batteries commonly used in robots and unmanned vehicles, NPS has additional management guidance (NPS LiPO SOP 1.4 series).

According to NAVSEA 9310.1C, any Lithium battery used for a Navy application must be tested and formally authorized for use by NAVSEA. However there are healthy exceptions that cover many common applications.

**Exceptions requiring only:** email report to NAVSEA for acquisition
- **Coin Cells:** COTS, single cell, 3 volt, 1Ah max
- **Rechargeable:** unmodified COTS with UL Listed rechargeable batteries, used in the device as recommended by the manufacturer, recharged by devices expressly designed for recharge of the specific battery, no more than 4 cells in series (less than 18V), and no more than 100 Wh.

**Exceptions requiring only:** Formal Request Letter (no testing)
- **“Small” Rechargeable Batteries:** One battery, 1-2 cells, no more than 3 Ah per cell
- **Non-rechargeable:** UL Listed, unmodified COTS, 1-2 cells, no more than 3Ah per cell, or 9 volt PP3 size snap connector battery
- **Non-rechargeable:** specific Navy use, 1-2 cells, no more than 3Ah per cell, protected from other electric power by blocking diodes and resistors.

Batteries outside of the exceptions for which a Formal Authorizations has already been secured by NPS Capacity Limited Site Authorization (Ser N841/1239), and must be managed IAW NPS LiPO SOP 1.4 series.
- **Lithium Ion Polymer (LiPo) less than 300 Wh in UASs, UUVs, and robotics at shore facilities, controlled ranges, and for marine research.**

Ready to submit an email request, Formal Request Letter, get started with the SOP, or just confused? Call NPS Safety Engineer Scott Giles x7568 or NPS HAZMAT coordinator Kathy Franklin x7661.

**This guidance is a reminder of NAVSEA 9310.1C procedures. This is not a substitute for the proper application of all the details of the instruction or the associated TECHMAN NAVSEA S9310-AQ-SAF-010 Second Revision.**