Manufacturing Improvements for DLA Lithium Batteries SBIR

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Improvements for Military Lithium Batteries

- PRC-148, PRC-152, PRC-154, BB-2590, PLM-4
 - Create open standards & enable competition
 - BB-2590 is competitively sourced, others are single source with no data package

Benefits:

- Increase commonality between packs
- Cost savings manufacturing costs & competition
- Surge capacity/shelf life improvements separate the COTS cells from the military-specific packs

Battery	BB-2590	PRC-148	PRC-152	PRC-154	PLM-4
Pros	Clear Specifications; Clear path to Service approval		Almost identical to -148	Greatest future potential as -148 and -152 are replaced with -	Simple pack design; Highest price (greatest improvement potential)
Cons	Already competitively procured	Will be superseded by - 154; likely to be first radio replaced		Low DLA procurement volume	Low volume
Volume (30 day avg.)	1,872	1,865	701	20	12
Recent Price:	\$142.24	\$197.24	\$233.70	\$247.01	\$809.43
Cost of Cells:	~\$48	~\$12	~\$18	~\$18	~\$80
Percent of Price Cells:	34%	6%	8%	7%	10%

Prototype Selection Tradeoff Summary

NSN Consolidation Benefits

PRC-148 and PRC-152 can be combined into a single NSN

- Pack will "speak" correct language to each respective radio and charger
- Pins on radio side are compatible
- Pins on charger side can coexist BB-2590-style tear-off to hide unused pins if necessary
- Mechanical interfaces must be carefully designed, but are similar enough to be combined

