DEFENSE LOGISTICS AGENCY

AMERICA'S COMBAT LOGISTICS SUPPORT AGENCY









Battery R&D Network

January 25, 2017



BATTNET Program

Program Description:

- Defense Manufacturing Technology Program (DoDD 4200.15) and a designated Operational Energy Program
- Funds and executes Technology Implementation projects to lower costs, enhance manufacturing, and advance technology for DLA's battery supply chain (which are based on Service requirements)

Budget under PE# 0603680S:

\$3 million operating funds for FY17 and baseline for FYDP

Requirements:

- Joint Steering Group members review BAA proposals from industry
- DLA SBIR: Ten phase I projects awarded in FY15-FY16. Two phase II projects awarded in FY16.

R&D Program Office: DLA HQ J348, Fort Belvoir, VA 22060-6221



2016 BATTNET

SP4701-09-D-0049 Eskra Technical Products (completed July 2016)

Developed automated equipment for continuous, dry coating, electrode fabrication, and completed design for commercial-scale manufacturing line with B&W MegTec (Green Bay, WI).

AMMTIAC Support Task 0058 Alion Science & Technology (completed Dec 2016)

Completed lithium-ion power source design for replacing the nickel cadmium system on the TOW2 Anti-Tank Missile Guidance Set. Successfully passed an operational simulation at US Army AMCOM and provided a technical data package for acquisition and qualification.

SP4701-09-D-0046 EnerSys (Quallion Division)

Completed lithium-ion battery design updates for manufacturing and to meet final NAVAIR specification requirements (MIL-PRF-29595/5-1), which will replace nickel cadmium system on the MH-60 helicopter. Performing risk reduction tests.



BATTNET II BAA 0004-16

- Battery Network Manufacturing Technology Research and Development
- 22 August 2016 DLA Solicitation number: BAA0004-16
- https://www.fbo.gov/spg/DLA/J3/DSCP-PB/BAA0004-16/listing.html
- DLA R&D accepting white papers for five (5) years. Areas of Interest:
 - C.1 Manufacturing and Automation Innovations
 - C.2 Optimization of Design for Manufacturability
 - C.3 Process Improvements
 - C.4 Advancement of Manufacturing Readiness for Alternative Supplies
 - C.5 Manufacturing Technology Improvement for Existing Supplies
 - C.6 Supply Chain Management Improvement
- Technology solutions must include advancements in processes or equipment used in the production of batteries or components of existing DLA battery products or qualified prototypes.



DLA SBIR Phase II

SP4701-16-C-0079 Bren-Tronics, Commack, NY (Sept 2016 - 2018)

Develop automated processes to lower cost and improve capabilities for communications batteries

SP4701-16-C-0084 ADA Technologies, Littleton, CO (Sept 2016 - 2018)

Fabricate high speed, automated laser electrode cutter and demonstrate with industry partners



DLA SBIR Phase I

Physical Sciences Inc.

Reduced solvent cathode production with advanced safety shutoff

CAMX Power LLC

- Zero-volt capable cells designed for high power requirements
- Advanced internal short detection process and equipment

Xerion Advanced Battery Corp.

High performance, low cost lithium-ion cell production

K2 Energy Solutions

VOC-free aqueous binders for cathode manufacturing

OnTo Technology

- Battery testing from recycled, high nickel, electrode materials (active) American Energy Technologies Corp.
- Efficient methods for lower cost lithium-CFx batteries
 (active) Big Delta Systems
- Additive manufacturing for lithium-ion electrodes (active) Turn Around Factor
- Standardized components for communication batteries



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