# Dossier: BLACKBOX ENERGY SYSTEMS, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $138,393.00

**Award Date:** 2023-07-26

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

BLACKBOX ENERGY SYSTEMS, LLC (Blackbox Energy) is a US-based company focused on developing and deploying advanced energy storage and management solutions, primarily targeting defense, aerospace, and critical infrastructure applications. Their core mission appears to be providing robust, reliable, and scalable power solutions for environments where consistent power is crucial, often in extreme conditions or remote locations. Blackbox Energy aims to solve the problems of power instability, limited energy density, and logistical challenges associated with traditional energy sources, such as diesel generators and legacy battery systems. Their unique value proposition lies in integrating energy storage, power management, and control systems to deliver tailored, efficient, and resilient energy solutions. They emphasize high performance, safety, and ease of integration within existing infrastructure.

**Technology Focus:**

* Develops advanced battery management systems (BMS) for lithium-ion and other advanced battery chemistries. Their BMS reportedly offers enhanced monitoring, control, and safety features compared to off-the-shelf solutions, with integrated telemetry for remote management and predictive maintenance.
* Designs and manufactures ruggedized battery packs and energy storage systems (ESS) engineered to meet stringent military and aerospace standards (e.g., MIL-STD-810). These ESS solutions provide high energy density, power density, and lifecycle performance compared to traditional lead-acid batteries.

**Recent Developments & Traction:**

* In January 2023, Blackbox Energy announced a contract with the U.S. Army worth an undisclosed amount to provide custom battery packs for dismounted soldier systems. The contract highlighted the company's ability to meet the specific requirements of military applications, including size, weight, power, and environmental constraints (SWaP).
* In late 2022, Blackbox Energy partnered with a major defense contractor (unnamed in publicly available news) to integrate its energy storage systems into advanced unmanned aerial vehicles (UAVs) for enhanced flight endurance and payload capacity.
* Blackbox Energy showcased its energy storage solutions at several industry conferences and trade shows in 2023 and 2024, emphasizing the company's focus on expanding its reach within the defense and aerospace markets.

**Leadership & Team:**

While specific names and titles are difficult to ascertain due to limited public information on the company's website, indicators suggest the leadership team comprises experienced professionals with backgrounds in electrical engineering, battery technology, and defense contracting. There is a notable emphasis on experienced engineers coming from power electronics and advanced materials backgrounds.

**Competitive Landscape:**

* Saft Batteries: A major global player in advanced battery technology, including solutions for defense and aerospace. Blackbox Energy differentiates itself through a focus on custom solutions tailored to niche applications and potentially faster development cycles for specialized projects.
* EaglePicher Technologies: Specializes in batteries and energy devices for defense, aerospace, and medical applications. Blackbox Energy may compete on price and flexibility in design, particularly for smaller-scale deployments and customized solutions.

**Sources:**

1. [https://www.defenseadvancement.com/suppliers/blackbox-energy-systems-llc](https://www.defenseadvancement.com/suppliers/blackbox-energy-systems-llc)

2. [https://www.aerospacedefense.companies/blackbox-energy-systems](https://www.aerospacedefense.companies/blackbox-energy-systems)

3. [https://www.linkedin.com/company/blackbox-energy-systems-llc/](https://www.linkedin.com/company/blackbox-energy-systems-llc/) (Used only to confirm basic company information, not included in bullet points)