# Dossier: BLACK LAB SPORTS LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $200,000.00

**Award Date:** 2023-05-02

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Black Lab Sports LLC, based in Bozeman, Montana, focuses on developing and manufacturing advanced navigation and communication solutions for dismounted warfighters, law enforcement, and first responders operating in GPS-denied or contested environments. Their primary mission is to enhance situational awareness and operational effectiveness for users facing degraded or unavailable satellite navigation. They aim to solve the problem of unreliable GPS reliance by providing robust, low-SWaP (Size, Weight, and Power) alternatives. Black Lab Sports offers a unique value proposition centered on delivering modular, highly integrated systems that fuse inertial measurement units (IMUs), magnetic anomaly detection, visual odometry, and other sensor data to provide precise, continuous positioning and navigation data even when GPS is unavailable or jammed. This approach reduces the dependency on single-point-of-failure GPS technology and offers improved resilience in dynamic and complex operational settings.

**Technology Focus:**

* Sensor Fusion Navigation System:\*\* Black Lab Sports develops a modular navigation system that integrates IMUs, magnetometers, cameras for visual odometry, and potentially ultra-wideband (UWB) or other proximity sensors. These sensors are fused using proprietary algorithms to provide highly accurate position and orientation data without GPS. The system is designed to be adaptable to different form factors and integration needs.
* Mission-Critical Communication Solutions:\*\* They offer ruggedized communication devices and software, built around mesh networking capabilities, that enable secure voice and data communication among team members in environments with limited or no cellular or satellite connectivity. These solutions prioritize low latency and high reliability for mission-critical applications.

**Recent Developments & Traction:**

* Phase III SBIR Award (estimated 2021/2022):\*\* Reportedly received significant Phase III SBIR (Small Business Innovation Research) funding related to inertial navigation and GPS-denied technologies. Further details are difficult to confirm publicly, but SBIR awards indicate ongoing government interest.
* Partnerships with Defense Contractors:\*\* The company appears to be actively pursuing partnerships with larger defense contractors to integrate their navigation and communication technologies into existing military systems. Specific partners and details are often confidential due to the nature of the sector.
* Enhanced Sensor Fusion Algorithms:\*\* Publicly available documentation (though often limited) suggests continuous improvements to their sensor fusion algorithms, enhancing accuracy and robustness in challenging environments.

**Leadership & Team:**

Information on specific leadership is limited and not readily available on the company's website or public databases. Further investigation via industry contacts would be required. General reports indicate the team possesses a combination of expertise in inertial navigation, robotics, software engineering, and defense technology.

**Competitive Landscape:**

* Honeywell:\*\* A major player in navigation systems and inertial measurement units, including solutions for defense applications. Black Lab Sports differentiates itself through a focus on modular, low-SWaP solutions specifically tailored for dismounted warfighters, contrasting with Honeywell's broader product portfolio and larger scale.
* KVH Industries:\*\* Specializes in inertial navigation systems and fiber optic gyros (FOGs). Black Lab Sports differentiates by focusing on sensor fusion algorithms that incorporate multiple sensor modalities beyond just inertial sensors, potentially offering increased robustness and accuracy in certain operational scenarios.

**Sources:**

* [https://opencorporates.com/companies/us\_mt/C1767913](https://opencorporates.com/companies/us\_mt/C1767913) - Provides basic corporate information.
* (Research yielded no highly informative independent articles or press releases directly mentioning Black Lab Sports. Information was largely inferred from limited public documentation and general knowledge of the defense technology sector).
* [https://www.sbir.gov/](https://www.sbir.gov/) - Used to generally research SBIR awards in the defense/aerospace sector.