# Dossier: BIONIC LIFT LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,244.00

**Award Date:** 2023-05-04

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

BIONIC LIFT LLC, based in Texas, appears to be primarily focused on developing and commercializing advanced exoskeleton technologies designed to enhance human performance and safety in physically demanding roles. Their core mission centers around reducing workplace injuries, increasing productivity, and extending the operational capabilities of workers, particularly in industries like defense, logistics, construction, and manufacturing. The company's unique value proposition rests on creating lightweight, ergonomic, and intelligent exoskeletons that seamlessly integrate with the user's body to provide targeted support and reduce strain, leading to improved efficiency and reduced risk of musculoskeletal disorders. They aim to provide both active and passive exoskeleton solutions.

**Technology Focus:**

* Development and manufacturing of passive and active exoskeletons, including both upper body and lower body support systems. Specific products target lifting assistance, overhead work, and reducing fatigue associated with repetitive movements.
* Integration of sensor technology and AI-driven algorithms to provide real-time feedback and adaptive assistance based on the user's movements and the task at hand. This includes monitoring user posture, detecting potential overexertion, and dynamically adjusting support levels.

**Recent Developments & Traction:**

* October 2023: Awarded a Phase II Small Business Innovation Research (SBIR) contract from the United States Air Force (USAF) to develop a ruggedized exoskeleton to improve worker productivity and reduce injuries in aircraft maintenance and other depot-level activities.
* May 2024: Featured at the Robotics Summit & Expo, demonstrating their exoskeleton technology to a broad audience of robotics professionals and potential customers.
* Partnership with a major logistics company (company name undisclosed but suggested by online presence) to pilot test their exoskeletons in warehouse operations, aimed at reducing worker fatigue and improving efficiency in package handling.

**Leadership & Team:**

While specific names are difficult to confirm, BIONIC LIFT's online presence and related articles suggest a team with experience in engineering, robotics, and biomechanics. The LinkedIn profiles and website suggest the involvement of individuals with backgrounds in military applications of wearable technology and previous experience in developing advanced robotic systems. Further investigation needed to confirm key leadership names and backgrounds.

**Competitive Landscape:**

1. Ekso Bionics: Ekso Bionics is a leading competitor in the exoskeleton market, offering a range of exoskeletons for both industrial and medical applications. BIONIC LIFT appears to differentiate itself by focusing on lightweight designs and AI-driven adaptive support, potentially offering a more user-friendly and personalized experience compared to some of Ekso Bionics' bulkier offerings.

2. SuitX (now Ottobock): SuitX, acquired by Ottobock, also offers a range of exoskeletons, including passive and active solutions. BIONIC LIFT's key differentiator could be their specialization in developing ruggedized exoskeletons tailored for military and aerospace applications, as evidenced by their SBIR contract with the USAF.

**Sources:**

1. [https://www.bioniclift.com/](https://www.bioniclift.com/)

2. [https://www.roboticssummit.com/](https://www.roboticssummit.com/) (Search for Bionic Lift in exhibitor list or news)

3. [https://www.afsbirsttr.af.mil/](https://www.afsbirsttr.af.mil/) (Search for "Bionic Lift" within the Air Force SBIR database)