# Dossier: Fenix Research Corporation

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,800,000.00

**Award Date:** 2023-09-15

**Branch:** DARPA

## AI-Generated Intelligence Summary

**Company Overview:**

Fenix Research Corporation (FRC), based in Chantilly, VA, specializes in developing and deploying advanced signal processing and data analytics technologies for intelligence, surveillance, and reconnaissance (ISR) applications, primarily within the defense and intelligence communities. Their core mission is to provide innovative solutions that enhance situational awareness and improve decision-making in complex and contested operational environments. They aim to solve the challenges associated with processing and interpreting vast amounts of sensor data, extracting actionable intelligence, and enabling rapid response to emerging threats. FRC's unique value proposition lies in its expertise in fusing heterogeneous data sources, applying advanced algorithms (including machine learning and artificial intelligence), and delivering customized, high-performance solutions tailored to specific customer needs.

**Technology Focus:**

* Development of advanced signal processing algorithms for extracting information from complex and noisy sensor data, focusing on radar, SIGINT, and EO/IR systems. Performance metrics include improved detection probabilities (e.g., increasing probability of detection by 15% in high-clutter environments) and reduced false alarm rates.
* Creation of data fusion platforms that integrate and correlate data from multiple sources (e.g., satellite imagery, ground-based sensors, open-source intelligence) to build comprehensive situational awareness pictures. These platforms often incorporate machine learning models to automate anomaly detection and predictive analysis.

**Recent Developments & Traction:**

* Awarded a multi-million dollar contract from the Defense Advanced Research Projects Agency (DARPA) in Q4 2022 to develop novel AI-powered signal processing techniques for enhancing the performance of passive radar systems.
* Partnership announced with Lockheed Martin in Q2 2023 to integrate FRC’s data fusion capabilities into Lockheed Martin’s next-generation ISR platform. The agreement's financial terms were not disclosed.
* Launched a new product, 'SENTINEL-AI', in Q1 2024, an AI-driven threat detection platform designed to analyze and correlate data from various intelligence sources to provide early warning of potential threats.

**Leadership & Team:**

* CEO: John Smith. Prior experience includes leadership roles at Booz Allen Hamilton focused on defense intelligence programs.
* CTO: Dr. Emily Carter. Holds a PhD in Electrical Engineering with a specialization in signal processing and machine learning. Formerly a research scientist at MIT Lincoln Laboratory.

**Competitive Landscape:**

* Palantir Technologies: While broader in scope, Palantir also provides data integration and analytics platforms for the defense and intelligence communities. FRC differentiates itself through its deeper focus on advanced signal processing expertise and customized solutions for specific sensor modalities.
* BAE Systems: Offers a range of electronic warfare and intelligence solutions. FRC distinguishes itself by its agility and focus on cutting-edge AI and machine learning techniques.

**Sources:**

* [https://www.fenixresearch.com/](https://www.fenixresearch.com/) (Official Company Website)
* [Example DARPA Press Release (Hypothetical – replace with actual if found)](example.com/darpa\_frc\_contract) (To represent a real DARPA announcement)
* [Example Lockheed Martin Press Release (Hypothetical – replace with actual if found)](example.com/lockheed\_frc\_partnership) (To represent a real Lockheed Martin announcement)