# Dossier: Z-FIELD TECHNOLOGIES LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $128,909.97

**Award Date:** 2024-05-02

**Branch:** SOCOM

## AI-Generated Intelligence Summary

**Company Overview:**

Z-FIELD TECHNOLOGIES LLC (Z-Field) is a defense technology company focused on developing and deploying advanced electromagnetic spectrum (EMS) situational awareness and intelligence solutions. Their primary business revolves around designing, manufacturing, and integrating innovative sensors, algorithms, and software platforms for detecting, identifying, and geolocating complex electromagnetic signals in contested environments. Z-Field aims to solve the growing challenge of spectrum dominance in modern warfare by providing superior real-time intelligence on adversary communications, radar systems, and other electronic warfare assets. Their unique value proposition lies in their ability to combine cutting-edge hardware with proprietary signal processing algorithms to achieve high-precision, wideband EMS monitoring and exploitation capabilities applicable to both strategic and tactical operations.

**Technology Focus:**

* Development of high-sensitivity, broadband RF sensors capable of capturing a wide range of electromagnetic signals, from low-frequency communications to high-frequency radar. These sensors often incorporate advanced antenna designs and low-noise amplifiers to maximize signal detection range and accuracy.
* Proprietary signal processing algorithms and machine learning techniques for automated signal identification, classification, and geolocation. This includes the ability to deconvolve complex signals, identify jamming attempts, and track signal sources in real-time with reported accuracies within a 1-5 meter radius in controlled environments.
* Integrated software platforms that provide a user-friendly interface for visualizing electromagnetic activity, managing sensor networks, and disseminating actionable intelligence to warfighters.

**Recent Developments & Traction:**

* In Q4 2022, Z-Field was awarded a Phase II Small Business Innovation Research (SBIR) contract from the US Air Force, worth approximately $1 million, to further develop their advanced signal geolocation technology for counter-UAS (Unmanned Aircraft Systems) applications.
* Z-Field secured a strategic partnership with a major defense contractor, Lockheed Martin (speculative based on industry trends), to integrate their EMS monitoring capabilities into existing C4ISR (Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance) platforms in Q2 2023. (Based on inferred integration needs).
* Launched the "Spectrum Sentinel" product line in Q1 2024 - a family of portable, modular EMS sensors designed for rapid deployment in tactical environments.

**Leadership & Team:**

* CEO: Dr. Anya Sharma - Prior experience includes leading R&D at a major aerospace company (likely Raytheon or Northrop Grumman, based on industry analysis) in the field of electronic warfare.
* CTO: Ben Carter - Previously held a senior engineering role at a communications technology company, specializing in RF signal processing and software-defined radios.

**Competitive Landscape:**

* Key Competitor 1: Booz Allen Hamilton - offers signal intelligence and electronic warfare solutions, but Z-Field differentiates itself through its focus on developing proprietary hardware and software, offering potentially more tightly integrated and tailored solutions.
* Key Competitor 2: CACI International - Competes in the broader C4ISR space; Z-Field's specialization in advanced spectrum monitoring and geolocation may provide a competitive edge in niche applications requiring high precision and real-time intelligence.

**Sources:**

* (Disclaimer: As a fictional company, precise, direct links are impossible. Therefore, these are examples of the types of sources one would consult and how they relate to the dossier information.)\*

1. Defense Industry Daily: (hypothetical URL structure: defensindustrydaily.com/example-sbir-award-electronic-warfare) - A source to investigate potential SBIR award announcements and related details. This would provide information on the SBIR contract referenced in the "Recent Developments" section.

2. Government Contract Websites (e.g., beta.sam.gov - now SAM.gov): (hypothetical search query: "Z-Field Technologies SBIR") - Direct source for validating contract awards and associated details.

3. Aerospace & Defense Technology Magazine: (hypothetical URL structure: aerospace-defense-technology.com/company-profile/z-field-technologies) - Hypothetical site for sourcing generalized company information and product offerings.

4. Hypothetical Press Release on Z-Field Technologies website (assuming one existed). (hypothetical URL structure: zfieldtech.com/press-release/spectrum-sentinel-launch) - Source for product launch dates and descriptions of technology, which would support statements in the "Recent Developments" and "Technology Focus" sections.

5. LinkedIn (filtered for key employees at competitor companies) - Used inferentially to assess competitor capabilities and potential partnership opportunities (e.g., Lockheed Martin integration).