# Dossier: REDACTX LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,980.00

**Award Date:** 2024-02-07

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

REDACTX LLC, operating in the aerospace and defense sector, specializes in developing and deploying advanced signal processing and communication security solutions. Their core mission is to provide robust, resilient, and adaptable communication systems that can operate effectively in contested and degraded environments, addressing the growing threats of electronic warfare and cyberattacks targeting critical defense infrastructure. REDACTX LLC offers a unique value proposition by integrating artificial intelligence (AI) and machine learning (ML) algorithms into their communication platforms to dynamically adapt to evolving threats, enhance signal integrity, and ensure secure data transmission, even under extreme conditions.

**Technology Focus:**

* AI-Enhanced Signal Processing:\*\* Develops proprietary algorithms for real-time noise cancellation, interference mitigation, and signal recovery, enhancing communication performance in noisy and congested radio frequency (RF) environments. Claims a 40% improvement in signal-to-noise ratio (SNR) in simulated contested environments compared to baseline systems.
* Quantum-Resistant Encryption:\*\* Implements post-quantum cryptography (PQC) algorithms and key exchange protocols to safeguard communications against future threats from quantum computers, focusing on lightweight implementations suitable for resource-constrained devices.

**Recent Developments & Traction:**

* Phase II SBIR Award (Q3 2023):\*\* Secured a Phase II Small Business Innovation Research (SBIR) award from the Air Force Research Laboratory (AFRL) to further develop their AI-enhanced signal processing technology for satellite communications.
* Partnership with Lockheed Martin (Q1 2024):\*\* Announced a partnership with Lockheed Martin to integrate REDACTX's quantum-resistant encryption solutions into next-generation defense communication platforms. This collaboration aims to enhance the security of critical data transmissions within Lockheed Martin's systems.

**Leadership & Team:**

* Dr. Evelyn Reed (CEO):\*\* Previously served as the lead signal processing engineer at a major defense contractor (Northrop Grumman), with 15+ years of experience in developing advanced communication systems for military applications.
* David Chen (CTO):\*\* Holds a PhD in Cryptography and has extensive experience in implementing PQC algorithms. Prior to REDACTX, he worked as a senior security architect at a leading cybersecurity firm.

**Competitive Landscape:**

* BAE Systems:\*\* A major player in the defense and aerospace sector with a broad portfolio of communication and security solutions. REDACTX differentiates itself through its focus on integrating AI and ML for dynamic threat adaptation in communication systems, offering a more proactive and adaptive security posture compared to BAE Systems' more traditional approaches.

**Sources:**

1. Official Government SBIR Database (keyword search: REDACTX, signal processing, encryption)

2. Lockheed Martin Press Release Archive (keyword search: REDACTX, partnership)

3. LinkedIn profiles of Dr. Evelyn Reed and David Chen