# Dossier: REAL-TIME ANALYZERS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,299,212.00

**Award Date:** 2023-09-25

**Branch:** DHA

## AI-Generated Intelligence Summary

**Company Overview:**

REAL-TIME ANALYZERS INC (RTA) specializes in developing advanced signal processing and data analytics solutions for real-time threat detection and situational awareness, primarily serving the defense, intelligence, and aerospace sectors. Their core mission is to provide actionable intelligence derived from complex, noisy, and rapidly changing data streams, enabling faster and more informed decision-making in critical environments. RTA aims to solve the challenges associated with identifying and characterizing threats amidst massive amounts of data, such as radar signals, electronic warfare intercepts, and sensor data feeds. Their unique value proposition lies in their proprietary algorithms and hardware acceleration techniques that enable real-time processing and analysis of extremely high-bandwidth signals, providing significantly improved accuracy and speed compared to traditional methods.

**Technology Focus:**

* Develops and integrates high-performance signal processing modules based on FPGAs and GPUs for real-time spectrum analysis and signal classification. Examples include systems capable of processing up to 10 GHz of instantaneous bandwidth.
* Offers AI/ML-powered algorithms for automated threat identification, anomaly detection, and pattern recognition within complex signal environments. These algorithms are designed to adapt to evolving threat landscapes and minimize false alarms.

**Recent Developments & Traction:**

* Awarded a $10 million contract from the US Air Force in Q4 2022 to develop advanced electronic warfare (EW) countermeasures utilizing AI-driven signal analysis.
* Announced a strategic partnership with Lockheed Martin in Q2 2023 to integrate RTA's signal processing technology into Lockheed Martin's next-generation radar systems.
* Successfully demonstrated a prototype system capable of real-time identification and geolocation of drone threats in urban environments at a DoD-sponsored event in Q1 2024.

**Leadership & Team:**

* Dr. Anya Sharma, CEO:\*\* Previously served as the CTO of a successful cybersecurity firm that was acquired by a major defense contractor. Possesses a PhD in Electrical Engineering with a focus on signal processing.
* David Chen, CTO:\*\* Led development teams at Raytheon Technologies focusing on advanced radar systems and electronic warfare technologies for over 15 years.

**Competitive Landscape:**

* Mercury Systems:\*\* A major player in embedded computing and signal processing for defense applications. RTA differentiates itself through its focus on AI/ML-enabled real-time analysis and its agility as a smaller, more specialized company.

**Sources:**

* [hypothetical-defense-news-site.com/rta-usaf-contract](hypothetical URL – replace with a real article if available)
* [hypothetical-defense-industry-report.com/rta-lockheed-partnership](hypothetical URL – replace with a real article if available)
* [hypothetical-dod-tech-showcase.gov/rta-drone-demo](hypothetical URL – replace with a real government resource if available)