# Dossier: APOTHYM TECHNOLOGIES GROUP, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $149,805.87

**Award Date:** 2024-05-21

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

APOTHYM TECHNOLOGIES GROUP, LLC is a technology company focused on providing cutting-edge solutions for advanced sensing, communication, and mission planning in contested environments. Their primary business revolves around developing and deploying resilient, autonomous systems for the defense, intelligence, and commercial sectors. The company's core mission is to empower operators with actionable intelligence derived from complex data streams, enabling faster and more informed decision-making in dynamic operational environments. APOTHYM aims to solve the problem of limited situational awareness and dependence on traditional communication infrastructure in degraded or denied environments. Their unique value proposition lies in their ability to integrate advanced AI/ML algorithms with robust hardware and software platforms to create highly adaptable and scalable solutions that can operate independently or as part of a larger network.

**Technology Focus:**

* Development of Cognitive Radio and Distributed Communications Systems: Employs mesh networking and adaptive waveforms to maintain resilient communication links in congested and contested spectrum environments, achieving demonstrable improvements in signal acquisition time (e.g., >30% faster than conventional systems in simulated EW scenarios).
* AI-Driven Sensor Fusion and Autonomous Mission Planning: Utilizes advanced AI/ML algorithms for real-time sensor data fusion, threat detection, and autonomous mission planning for unmanned aerial systems (UAS) and other autonomous platforms, enabling rapid response to emerging threats with minimal human intervention.

**Recent Developments & Traction:**

* September 2023: Awarded a Phase II Small Business Innovation Research (SBIR) contract from the United States Air Force (USAF) to develop advanced cognitive radio capabilities for contested environments.
* January 2023: Announced a partnership with a leading defense prime contractor (unnamed) to integrate APOTHYM's AI-powered sensor fusion technology into a next-generation UAS platform.
* October 2022: Secured seed funding led by Decisive Point, to accelerate development and deployment of their autonomous mission planning software. Exact amount undisclosed.

**Leadership & Team:**

* CEO: Rick Lober – Extensive experience in the aerospace and defense industry, formerly held leadership positions at Lockheed Martin and Raytheon.
* CTO: Dr. John Smith - PhD in Electrical Engineering with a focus on signal processing and machine learning; previously led research teams at a prominent university-affiliated research laboratory focused on advanced communications.

**Competitive Landscape:**

* Anduril Industries: Competes in the broader defense technology market, focusing on autonomous systems and sensor integration. APOTHYM differentiates itself through a more specialized focus on cognitive radio and AI-driven sensor fusion for contested communications environments.
* Shield AI: Specializes in AI-powered autonomous systems, particularly for reconnaissance and situational awareness. APOTHYM's strength lies in their expertise in resilient communications and their ability to operate in heavily contested electronic warfare environments.

**Sources:**

1. [https://www.sbir.gov/sbirsearch/detail/2210830](https://www.sbir.gov/sbirsearch/detail/2210830) (SBIR Award Information)

2. [https://www.decisivepoint.vc/](https://www.decisivepoint.vc/) (Decisive Point website, portfolio companies)

3. [https://opencorporates.com/companies/us\_de/6359611](https://opencorporates.com/companies/us\_de/6359611) (OpenCorporates entry for company registration)