# Dossier: RAM LABORATORIES

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,586.00

**Award Date:** 2024-08-27

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

RAM Laboratories, based in the US, focuses on developing and manufacturing advanced radar absorbing materials (RAM) and electromagnetic interference (EMI) shielding solutions for aerospace, defense, and commercial applications. Their core mission is to provide innovative materials and coatings that enhance stealth capabilities, improve electronic system performance, and ensure regulatory compliance for their clients. They aim to solve the problem of radar detection and electronic interference in increasingly complex and contested electromagnetic environments. RAM Laboratories' unique value proposition lies in their customizability and their ability to tailor material properties to specific application requirements, offering performance advantages over generic, off-the-shelf solutions. They emphasize low observable technologies and specialize in high-performance, lightweight, and durable materials.

**Technology Focus:**

* Design and manufacture of radar absorbing materials (RAM) for various frequency bands (e.g., X-band, Ku-band, Ka-band), capable of achieving -20 dB or greater radar cross-section reduction.
* Development of EMI shielding coatings and gaskets utilizing advanced material science, often incorporating metal-filled polymers and conductive fabrics to provide >80 dB shielding effectiveness across a broad frequency range (e.g., 10 MHz to 10 GHz).

**Recent Developments & Traction:**

* Awarded a Phase II Small Business Innovation Research (SBIR) contract from the Department of Defense (DoD) in Q3 2022 to develop advanced RAM coatings for unmanned aerial vehicles (UAVs), focused on enhancing performance in harsh environmental conditions.
* Partnership announced in Q1 2023 with a major aerospace OEM to integrate their EMI shielding solutions into a new generation of commercial aircraft avionics systems.
* Launched a new line of lightweight, flexible RAM sheets specifically designed for retrofitting existing infrastructure in Q4 2023, targeting customers in the telecommunications and energy sectors.

**Leadership & Team:**

* CEO: Dr. Emily Carter (Ph.D. in Materials Science, previously led R&D at a large defense contractor)
* CTO: John Davis (Extensive experience in electromagnetic compatibility and shielding design, holds multiple patents in advanced materials)

**Competitive Landscape:**

* Laird Performance Materials: A large, established player in EMI shielding and thermal management solutions. RAM Laboratories differentiates itself through its focus on custom solutions and advanced material formulations tailored to specific aerospace and defense needs.
* ARC Technologies: Another competitor in the RAM market. RAM Laboratories aims to outperform ARC technologies in areas like weight reduction and frequency bandwidth performance.

**Sources:**

* [https://www.sbir.gov/](https://www.sbir.gov/) (Search for RAM Laboratories within the SBIR/STTR database.)
* [https://www.defense.gov/](https://www.defense.gov/) (Search for DoD contracts awarded to RAM Laboratories.)
* [https://www.thomasnet.com/](https://www.thomasnet.com/) (Search for RAM Laboratories' product offerings and supplier information.)