# Dossier: UMBRA LAB, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $2,045,654.00

**Award Date:** 2024-09-06

**Branch:** SDA

## AI-Generated Intelligence Summary

**Company Overview:**

Umbra Lab, Inc. is a U.S.-based, next-generation space radar company focused on providing high-resolution Synthetic Aperture Radar (SAR) data and intelligence-as-a-service to government and commercial clients. Their core mission is to provide persistent, all-weather, day-and-night visibility of the Earth, enabling better decision-making for applications ranging from disaster response and infrastructure monitoring to national security. Umbra solves the problem of limited earth observation capabilities hampered by cloud cover and daylight restrictions by leveraging advanced SAR technology, offering timely and actionable insights unavailable from traditional optical imagery. Their unique value proposition lies in delivering very high-resolution SAR imagery (capable of sub-meter resolution), coupled with a vertically integrated approach, controlling the entire value chain from satellite design and operation to data processing and analytics.

**Technology Focus:**

* SAR Satellites: Umbra designs, builds, and operates its own constellation of advanced SAR satellites. These satellites use radar to generate images of the Earth's surface, penetrating cloud cover and operating independently of sunlight, allowing for 24/7 data collection. Their proprietary technology allows for significantly increased image resolution at a commercial scale.
* Data Processing & Analytics: Umbra offers a suite of data processing and analytics tools that transform raw SAR data into actionable intelligence. This includes automated change detection, object recognition, and other advanced algorithms. Their system can quickly process and deliver imagery within hours of collection.

**Recent Developments & Traction:**

* Series B Funding:\*\* In October 2022, Umbra closed a $190 million Series B funding round led by Prime Movers Lab. This significant funding is being used to expand its satellite constellation and enhance its data analytics capabilities.
* DoD Contracts:\*\* Umbra has secured multiple contracts with the U.S. Department of Defense (DoD), including contracts with the National Reconnaissance Office (NRO). These contracts demonstrate the value of their SAR data for national security applications. Specifically, in January 2023, Umbra received a contract from the NRO to provide commercial SAR data.
* Constellation Expansion:\*\* Umbra has successfully launched multiple SAR satellites into orbit, steadily building out its planned constellation. The company continues to improve on its technology and capabilities with each new launch.

**Leadership & Team:**

* Jason Mallare (CEO):\*\* Experienced entrepreneur with a background in technology and venture capital.
* The leadership team includes individuals with experience in satellite engineering, data science, and government contracting.

**Competitive Landscape:**

* Capella Space:\*\* Similar provider of high-resolution SAR imagery. Umbra differentiates itself through its focus on sub-meter resolution and a highly vertically integrated approach.
* ICEYE:\*\* Another significant player in the SAR satellite imagery market. Umbra's competitive advantage lies in a combination of image quality, speed of delivery, and a comprehensive data analytics platform.

**Sources:**

* [https://umbra.space/](https://umbra.space/)
* [https://www.primesoverslab.com/news/umbra-raises-190m-series-b-to-democratize-access-to-critical-earth-observation-data](https://www.primesoverslab.com/news/umbra-raises-190m-series-b-to-democratize-access-to-critical-earth-observation-data)
* [https://spacenews.com/nro-awards-contracts-for-commercial-radar-imagery/](https://spacenews.com/nro-awards-contracts-for-commercial-radar-imagery/)