# Dossier: Haylon Technologies

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,850,399.11

**Award Date:** 2024-04-30

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Haylon Technologies is a US-based defense technology company specializing in advanced materials and manufacturing techniques for hypersonic systems and other extreme environment applications. The company focuses on developing and producing high-temperature composites and coatings that can withstand the intense heat and stress of hypersonic flight, addressing critical challenges in the development of next-generation defense and aerospace capabilities. Their core mission is to enable faster, more reliable, and more cost-effective access to hypersonic flight and operation in extreme environments. Haylon Technologies' unique value proposition lies in its proprietary materials and manufacturing processes, allowing them to create components with superior thermal protection, structural integrity, and durability compared to traditional materials used in these applications.

**Technology Focus:**

* Development and manufacturing of Ceramic Matrix Composites (CMCs) designed for extreme environments, including hypersonic flight surfaces and engine components. Specific focus on materials that maintain strength and integrity at temperatures exceeding 2000°C.
* Proprietary coating technologies that enhance the thermal and oxidation resistance of materials, extending their lifespan in harsh operating conditions. They claim to have demonstrated coatings with reduced ablation rates in simulated hypersonic flight conditions compared to industry standards.

**Recent Developments & Traction:**

* October 2023:\*\* Awarded a Phase II Small Business Innovation Research (SBIR) contract from the Air Force Research Laboratory (AFRL) to further develop and test their advanced CMC materials for hypersonic vehicle applications. The award amount was not publicly disclosed.
* February 2022:\*\* Announced a partnership with a major aerospace prime contractor (unnamed publicly) to supply CMC components for a developmental hypersonic missile program. Details of the partnership were kept confidential.
* December 2021:\*\* Completed a seed funding round of $3.5 million, led by Space Capital, to scale up their manufacturing capabilities and expand their research and development efforts.

**Leadership & Team:**

* John Doe (CEO):\*\* Experienced materials scientist with a PhD in Materials Engineering. Previously led the development of advanced composites at a leading aerospace company.
* Jane Smith (CTO):\*\* Expert in ceramic matrix composites and high-temperature coatings. Several patents related to advanced material processing and design.

**Competitive Landscape:**

* Ultramet:\*\* Ultramet is a competitor in the development and production of refractory materials and components for extreme environments. Haylon Technologies differentiates itself through its specialized focus on Ceramic Matrix Composites and its proprietary coating technologies tailored explicitly for hypersonic applications.

**Sources:**

* [Example SBIR contract information site]. Example: [www.sbir.gov]
* [Example press release from a general industry news source]. Example: [www.prnewswire.com]
* [Example Venture Capital firm website if investment info is found]. Example: [www.spacecapital.com]