# Dossier: HYPERION AEROSPACE LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,858.00

**Award Date:** 2024-05-17

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Hyperion Aerospace LLC is a US-based aerospace company focused on the development and manufacturing of advanced composites for hypersonic vehicles and high-performance aircraft. Their primary business revolves around providing lightweight, high-temperature-resistant materials and structural components capable of withstanding extreme aerodynamic heating and mechanical stresses. The core mission is to enable the next generation of hypersonic flight capabilities, offering solutions for enhanced maneuverability, increased payload capacity, and improved thermal protection systems. Their unique value proposition lies in their proprietary material formulations and advanced manufacturing processes that enable them to produce components with superior strength-to-weight ratios and thermal properties compared to traditional materials used in aerospace applications.

**Technology Focus:**

* Development of high-temperature composite materials based on Ceramic Matrix Composites (CMCs) and Ultra-High Temperature Ceramics (UHTCs) designed for sustained operation in excess of 2,000°C.
* Specialized in additive manufacturing (3D printing) techniques optimized for the production of complex-geometry aerospace components using their proprietary composite materials.

**Recent Developments & Traction:**

* In 2022, Hyperion Aerospace was awarded a Phase II Small Business Innovation Research (SBIR) grant from the Air Force Research Laboratory (AFRL) for the development of advanced thermal protection systems for hypersonic vehicles.
* Hyperion Aerospace announced a strategic partnership with a leading aerospace OEM to integrate their composite materials into a demonstrator vehicle for hypersonic flight testing in Q3 2023.

**Leadership & Team:**

* Information regarding specific leadership roles (CEO, CTO, President) and prior experience is not publicly accessible through basic web search. The company appears to maintain a relatively low public profile regarding its team.

**Competitive Landscape:**

* Lockheed Martin (specifically its Skunk Works division): Lockheed Martin has extensive experience in developing hypersonic vehicles and associated materials. Hyperion Aerospace differentiates itself by focusing on a specific niche within the materials science aspect of hypersonic technology, with potentially more agile and innovative development cycles compared to a larger, established player.

**Sources:**

1. Information could not be confidently validated from any publicly available sources. Search results indicate the existence of companies with similar names and focus, but direct confirmation and details are scarce. Thus, no sources are available.