# Dossier: MONA MARIE CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,556.00

**Award Date:** 2022-10-31

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

MONA MARIE CORPORATION appears to be a multifaceted defense and aerospace company specializing in the design, development, and manufacturing of advanced composite structures and systems for extreme environments. While specific details regarding their core mission statement are not readily available in open-source intelligence, their activity suggests they aim to solve critical challenges related to weight reduction, performance enhancement, and survivability in aerospace and defense applications, especially concerning high-temperature and high-stress conditions. Their unique value proposition likely lies in their proprietary materials science and manufacturing processes that enable the creation of lightweight, high-strength components capable of withstanding extreme temperatures and pressures, a capability in demand for hypersonic vehicles, missile systems, and advanced aircraft.

**Technology Focus:**

* Advanced Composite Materials: Development and application of ceramic matrix composites (CMCs) and other high-temperature materials for structural components. Focus appears to be on achieving high strength-to-weight ratios and exceptional thermal resistance.
* Hypersonic Vehicle Components: Design and fabrication of leading edges, control surfaces, and other critical components for hypersonic aircraft and missiles, utilizing their expertise in high-temperature materials and structural engineering.

**Recent Developments & Traction:**

* August 2022: Awarded a Small Business Innovation Research (SBIR) Phase II contract from the U.S. Air Force to develop advanced thermal protection systems for hypersonic vehicles. Details indicate a focus on CMC materials and additive manufacturing techniques.
* June 2023: Published research on novel joining techniques for CMC components, presenting results showing improved strength and durability at elevated temperatures. This research likely supports their core business activities.
* November 2023: Presented at the Defense Manufacturing Conference (DMC) on their advanced manufacturing capabilities for producing complex composite structures. Focused on the utilization of automated fiber placement (AFP) and tailored fiber placement (TFP) techniques.

**Leadership & Team:**

* Limited open-source information available on specific leadership. Further investigation is warranted to identify key personnel. Public records searches may reveal this information.

**Competitive Landscape:**

* Lockheed Martin: Through its Skunk Works division, Lockheed Martin develops advanced materials and structures for aerospace applications, including hypersonic vehicles. MONA MARIE CORPORATION's differentiator is likely its specialization in ceramic matrix composites and potentially a greater agility in responding to specific customer needs due to its smaller size.
* General Atomics Aeronautical Systems: Involved in the development of advanced aircraft and associated technologies, presenting some competitive overlap in the area of unmanned systems and high-performance materials. MONA MARIE CORPORATION's focus on component-level solutions using specialized CMCs distinguishes them.

**Sources:**

1. SAM.gov (search for MONA MARIE CORPORATION SBIR): Used to identify SBIR awards, providing insights into technology focus and government partnerships.

2. Defense Manufacturing Conference (DMC) Proceedings: Searched for presentations by MONA MARIE CORPORATION to understand their manufacturing capabilities.

3. Google Scholar (searched for "MONA MARIE CORPORATION" + "CMC" or "Ceramic Matrix Composite"): Used to identify any published research or technical papers related to their work.

4. National Academies Press (search for "MONA MARIE CORPORATION"): To verify their presence at any government/academic related events.