# Dossier: MOUNTAIN AEROSPACE RESEARCH SOLUTIONS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,964.00

**Award Date:** 2023-04-27

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Mountain Aerospace Research Solutions, Inc. (MARS) appears to be a company focused on developing and providing specialized engineering services, innovative technologies, and integrated solutions primarily to the aerospace, defense, and intelligence communities. The core mission revolves around addressing complex technological challenges related to advanced navigation, signal processing, sensor development, and data fusion for challenging environments. Their value proposition centers on delivering high-performance, customized solutions and capabilities in areas such as GPS-denied navigation, electronic warfare resilience, and autonomous systems enabling improved situational awareness and operational effectiveness for government and commercial clients. MARS aims to solve the increasing demand for robust, resilient, and intelligent systems amidst evolving threats and operational constraints.

**Technology Focus:**

* Development of Inertial Navigation System (INS)/Global Navigation Satellite System (GNSS) integration algorithms and hardware for precise positioning, navigation, and timing (PNT) solutions in GPS-denied or challenged environments. This likely involves advanced Kalman filtering techniques, sensor fusion algorithms, and embedded systems design.
* Design and implementation of advanced signal processing techniques for radar systems, electronic warfare applications, and communication systems. These may include adaptive beamforming, interference mitigation, and signal intelligence (SIGINT) processing capabilities.

**Recent Developments & Traction:**

* In June 2023, MARS was awarded a Small Business Innovation Research (SBIR) Phase I contract by the U.S. Air Force to develop a novel anti-jamming algorithm for GPS receivers operating in contested environments, highlighting their work in GPS-denied navigation and electronic warfare.
* Undisclosed contract awards (likely DoD related) mentioned on the company's website relating to the development of advanced sensor processing algorithms for airborne intelligence, surveillance, and reconnaissance (ISR) applications.

**Leadership & Team:**

* While specific leadership names are not easily verifiable through online searches, the company’s experience and expertise implies a strong technical leadership team with backgrounds in aerospace engineering, signal processing, and defense contracting. Further investigation would be required to determine the specific personnel.

**Competitive Landscape:**

* NovAtel (Hexagon Positioning Intelligence): Competes in the high-precision GNSS and INS market, but MARS likely differentiates through specialized solutions and a stronger focus on military/defense applications with customized engineering services.
* Northrop Grumman: While significantly larger, Northrop Grumman also develops navigation and sensor systems. MARS offers the agility and responsiveness of a smaller company focusing on niche requirements within the defense and aerospace domains.

**Sources:**

* [https://mars-inc.com/](https://mars-inc.com/) - Official company website.
* [https://www.sbir.gov/sbirsearch/detail/2315591](https://www.sbir.gov/sbirsearch/detail/2315591) - SBIR award details.