# Dossier: FIREHAWK AEROSPACE INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,622.00

**Award Date:** 2024-09-30

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Firehawk Aerospace Inc. is a technology company focused on developing and manufacturing advanced propulsion systems and hypersonic technologies for defense and aerospace applications. Their core mission centers around providing significantly more affordable and responsive access to space and hypersonic flight, thereby enabling faster development cycles and reducing overall mission costs. They aim to solve the current limitations of existing propulsion systems which are often expensive, complex, and require long lead times, hindering innovation and rapid deployment of new technologies. Firehawk’s unique value proposition lies in its development of hybrid propulsion systems that combine the reliability and simplicity of solid rocket motors with the performance and throttle-ability of liquid rocket engines, offering a compelling alternative for various space launch and hypersonic applications.

**Technology Focus:**

* Hybrid Propulsion Systems: Development of hybrid rocket engines utilizing proprietary fuel formulations and advanced combustion chamber designs offering variable thrust and restart capabilities. They claim significant cost reductions (up to 50%) compared to traditional liquid rocket engines.
* Hypersonic Technologies: Research and development of scramjet and ramjet technologies tailored for hypersonic flight applications. This includes materials science, computational fluid dynamics (CFD), and advanced testing capabilities aimed at achieving sustained hypersonic flight.

**Recent Developments & Traction:**

* Awarded a Phase II Small Business Innovation Research (SBIR) contract from the US Air Force in Q1 2024 for the continued development of their hybrid propulsion technology for hypersonic applications.
* Partnered with Texas A&M University to conduct testing and analysis of their hybrid rocket engine performance at the university's high-altitude testing facility in late 2023.
* Announced successful ground testing of a prototype hybrid rocket engine capable of delivering 10,000 lbs of thrust in Q3 2022.

**Leadership & Team:**

* William Clay, CEO: Experienced entrepreneur with a background in aerospace engineering and business development. Prior experience includes roles at established aerospace companies. (Specific previous company names not reliably found, public profiles are limited).

**Competitive Landscape:**

* Stratolaunch: Stratolaunch is a competitor in the hypersonic space, aiming to offer launch and high-speed flight capabilities. Firehawk differentiates itself with its focus on hybrid propulsion technology, offering a potentially more cost-effective and adaptable solution for a broader range of applications compared to Stratolaunch's air-launch system.

**Sources:**

* [https://www.firehawkaerospace.com/](https://www.firehawkaerospace.com/)
* [https://www.linkedin.com/company/firehawk-aerospace/](https://www.linkedin.com/company/firehawk-aerospace/)
* [https://www.crunchbase.com/organization/firehawk-aerospace](https://www.crunchbase.com/organization/firehawk-aerospace)