# Dossier: REACTION SYSTEMS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,996.00

**Award Date:** 2023-02-08

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Reaction Systems, Inc. (RSI) is a technology company specializing in the development and manufacturing of advanced energetic materials and propulsion systems for defense and aerospace applications. Their primary business focuses on providing novel solid propellant formulations and rocket motor designs, particularly those optimized for high performance, enhanced safety, and reduced environmental impact. RSI aims to solve the limitations of traditional energetic materials, such as performance trade-offs between specific impulse and density, safety concerns associated with handling and storage, and the environmental footprint of legacy propellants. Their unique value proposition lies in their proprietary technologies for creating insensitive high explosives (IHE) and advanced propellants that offer improved performance, increased safety during handling and transportation, and reduced reliance on hazardous materials.

**Technology Focus:**

* Proprietary Energetic Material Formulations:\*\* RSI develops and manufactures unique energetic material formulations including insensitive high explosives (IHE) and high-performance solid propellants, some featuring reduced sensitivity to impact, friction, and electrostatic discharge. They claim improved specific impulse and density characteristics compared to traditional formulations.
* Advanced Rocket Motor Design & Manufacturing:\*\* RSI designs and manufactures solid rocket motors incorporating their advanced propellant formulations. This includes custom designs tailored to specific customer requirements and a focus on incorporating advanced materials and manufacturing techniques for increased efficiency and performance. They have demonstrated scaled manufacturing capability for multiple motor sizes.

**Recent Developments & Traction:**

* Contract Awards:\*\* In December 2023, RSI received a Phase II Small Business Innovation Research (SBIR) award for work on insensitive munitions.
* Technology Demonstrations:\*\* RSI has presented data related to their novel propellant formulations at scientific conferences and industry events, showcasing performance metrics and safety advantages. The exact specifics of these demonstrations are generally proprietary but point toward active development and testing of their core technology.

**Leadership & Team:**

* The CEO information is not readily available through basic web search. Further investigation into LinkedIn or subscription databases would be needed to fully identify the leadership team.

**Competitive Landscape:**

* Aerojet Rocketdyne:\*\* A large, established player in the aerospace and defense industry, providing a wide range of propulsion systems. RSI differentiates itself through its focus on niche, advanced energetic materials and its agile, customer-centric approach, which allows for rapid customization and innovation that may be slower in larger organizations.

**Sources:**

1. [https://www.sbir.gov/sbirsearch/detail/2333423](https://www.sbir.gov/sbirsearch/detail/2333423)

2. [https://defenseinnovationmarketplace.dtic.mil/companies/reaction-systems-inc/](https://defenseinnovationmarketplace.dtic.mil/companies/reaction-systems-inc/)