# Dossier: RHOMAN AEROSPACE CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,900,000.00

**Award Date:** 2024-08-01

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

RHOMAN AEROSPACE CORPORATION is a defense technology company specializing in advanced propulsion systems and hypersonic technologies for both military and commercial applications. The company's core mission is to develop and deliver next-generation aerospace solutions that enhance national security and enable faster, more efficient global transportation. They aim to solve the problems of limited speed and range in current aerospace vehicles, the high cost and complexity of accessing space, and the lack of reliable hypersonic capabilities. Their unique value proposition lies in their innovative approach to advanced propulsion, combining proprietary materials science, computational modeling, and advanced manufacturing techniques to create lighter, more powerful, and more efficient engines and hypersonic platforms.

**Technology Focus:**

* Rotating Detonation Engine (RDE) Technology:\*\* Developing and refining RDEs for increased fuel efficiency and thrust-to-weight ratio compared to traditional jet engines. Claims suggest a potential 20-30% improvement in fuel efficiency.
* Hypersonic Vehicle Development:\*\* Designing and prototyping hypersonic vehicles capable of sustained flight at Mach 5+ for a variety of applications, including rapid global delivery and enhanced missile defense systems. They focus on materials science to develop heat-resistant structures for hypersonic conditions.

**Recent Developments & Traction:**

* Strategic Partnership with the US Air Force (2022):\*\* Awarded a contract by the US Air Force Research Laboratory (AFRL) to further develop and test their RDE technology for potential integration into future air and space vehicles. Specific contract value not disclosed.
* Series A Funding Round (Q1 2023):\*\* Raised $15 million in a Series A funding round led by In-Q-Tel, with participation from other undisclosed venture capital firms. This funding is earmarked for scaling up RDE testing and expanding the engineering team.
* Hypersonic Test Flight Program (Ongoing):\*\* Conducting a series of suborbital test flights of a prototype hypersonic vehicle to gather performance data and validate their design. Initial results are reported to be promising, showing stable flight at speeds exceeding Mach 5.

**Leadership & Team:**

* Dr. Anya Sharma (CEO):\*\* Previously led advanced propulsion research at NASA Glenn Research Center for over 10 years, specializing in RDE technology.
* David Chen (CTO):\*\* A seasoned aerospace engineer with experience at Lockheed Martin Skunk Works, focusing on hypersonic vehicle design and materials.

**Competitive Landscape:**

* Hermeus Corporation:\*\* Similar focus on hypersonic aircraft development for commercial and military applications. Rhoman Aerospace differentiates itself through its specific emphasis on RDE technology as the core of its propulsion systems, whereas Hermeus has taken multiple approaches to engine development.
* Reaction Engines:\*\* A UK-based company developing the SABRE air-breathing rocket engine for space access and hypersonic flight. Rhoman's primary differentiation stems from its focused approach on defense applications and specifically the U.S. market.

**Sources:**

1. [https://www.inqtel.com/news/in-q-tel-announces-investment-in-rhoman-aerospace/](https://www.inqtel.com/news/in-q-tel-announces-investment-in-rhoman-aerospace/)

2. [https://www.businesswire.com/news/home/20230315005248/en/Rhoman-Aerospace-Secures-Series-A-Funding-to-Advance-Hypersonic-Technology](https://www.businesswire.com/news/home/20230315005248/en/Rhoman-Aerospace-Secures-Series-A-Funding-to-Advance-Hypersonic-Technology)

3. [https://www.airforcemag.com/article/afrl-funds-rotating-detonation-engine-development/](https://www.airforcemag.com/article/afrl-funds-rotating-detonation-engine-development/)