# Dossier: PARABILIS SPACE TECHNOLOGIES, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $189,923.85

**Award Date:** 2024-04-02

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Parabilis Space Technologies, Inc. is a rocket propulsion company specializing in the development and production of advanced, high-performance propulsion systems for small satellites and in-space applications. Their core mission is to provide affordable and reliable propulsion solutions that enable enhanced maneuverability, extended lifespan, and increased payload capacity for small spacecraft. They aim to solve the limitations of traditional propulsion systems by offering innovative chemical propulsion technologies that deliver higher thrust-to-weight ratios, improved specific impulse (Isp), and reduced overall system costs. Their unique value proposition lies in their focus on storable, high-performance bipropellant engines tailored for the growing small satellite market, specifically those requiring demanding in-space maneuvers.

**Technology Focus:**

* High-Performance Bipropellant Engines:\*\* Developing and manufacturing bipropellant rocket engines that utilize storable propellants such as MON-25/MMH, achieving Isp values exceeding 320 seconds in vacuum and thrust levels scalable from 25 lbf to 100 lbf.
* Advanced Propellant Feed Systems:\*\* Designing and implementing pressure-regulated and pump-fed propellant feed systems optimized for small satellite integration, focusing on minimizing system mass and complexity while maintaining precise propellant delivery.

**Recent Developments & Traction:**

* SBIR Phase III Award (September 2021):\*\* Received a Phase III Small Business Innovation Research (SBIR) award from the US Air Force to mature and demonstrate their bipropellant propulsion technology for small satellite applications.
* Contract with Space Forge (2022):\*\* Announced a contract with Space Forge for high-performance in-space propulsion.
* Contract with Rogue Space Systems (2023):\*\* Secured a contract with Rogue Space Systems to provide advanced propulsion solutions for Rogue's orbital transfer vehicles.

**Leadership & Team:**

* David Vanhooser (CEO):\*\* Extensive experience in rocket propulsion systems, including previous roles at Aerojet Rocketdyne and as a founder of other aerospace companies.
* While specific CTO information is not publicly available in depth, the team page indicates strong engineering and propulsion backgrounds.

**Competitive Landscape:**

* Ursa Major Technologies:\*\* Another US-based company developing rocket engines. Parabilis differentiates itself by focusing exclusively on the small satellite market and providing highly customizable, storable bipropellant solutions, while Ursa Major targets a broader range of launch vehicle and in-space applications.
* Aerojet Rocketdyne:\*\* An established player in rocket propulsion. Parabilis distinguishes itself through its agility, lower cost structure, and dedicated focus on the small satellite market, offering a more streamlined and tailored approach compared to Aerojet's larger, more complex offerings.

**Sources:**

* [https://parabilis-space.com/](https://parabilis-space.com/)
* [https://www.spacewatch.global/2021/09/parabilis-space-technologies-receives-phase-iii-sbir-award-to-advance-bipropellant-propulsion-technology/](https://www.spacewatch.global/2021/09/parabilis-space-technologies-receives-phase-iii-sbir-award-to-advance-bipropellant-propulsion-technology/)
* [https://rogue-space.com/rogue-space-partners-with-parabilis-space-technologies-for-advanced-in-space-propulsion/](https://rogue-space.com/rogue-space-partners-with-parabilis-space-technologies-for-advanced-in-space-propulsion/)