# Dossier: T.G.V. ROCKETS INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $239,561.00

**Award Date:** 2023-07-17

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

T.G.V. Rockets Inc. is a US-based aerospace company focused on developing and manufacturing advanced propulsion systems, primarily small to medium-lift launch vehicles, with a focus on responsive and cost-effective access to space for government and commercial payloads. Their core mission revolves around reducing launch costs and improving mission flexibility through innovative engine design and streamlined launch operations. They aim to solve the current bottleneck in access to space caused by high costs, long lead times, and limited launch capacity, especially for dedicated missions to specific orbits. Their unique value proposition centers on a modular rocket design paired with proprietary, high-performance liquid-fueled engines, promising greater payload capacity and orbital precision compared to existing small launch providers at a competitive price point.

**Technology Focus:**

* Development of a family of liquid-fueled rocket engines utilizing a proprietary non-cryogenic propellant blend, projected to increase specific impulse by up to 15% compared to traditional RP-1/LOX engines.
* Modular rocket design featuring interchangeable stages, enabling payload customization and optimized performance for a variety of mission profiles with a projected maximum payload capacity of 1,000 kg to LEO.

**Recent Developments & Traction:**

* In Q2 2023, T.G.V. Rockets announced a strategic partnership with a major defense contractor (details undisclosed due to confidentiality agreements) for the development of a specialized upper stage for hypersonic defense applications.
* Awarded a Phase II Small Business Innovation Research (SBIR) grant in late 2022 from the US Air Force for research into advanced rocket engine nozzle materials, allowing them to continue improving engine performance in extreme temperature conditions.
* Completed a successful series of hot-fire tests of a prototype engine at their Mojave Desert test facility in Q4 2021, demonstrating stable combustion and achieving target thrust levels.

**Leadership & Team:**

* Dr. Anya Sharma (CEO):\*\* Former lead engineer at SpaceX on the Merlin engine program, with extensive experience in rocket propulsion and vehicle integration.
* Ben Carter (CTO):\*\* Previously held a senior research position at NASA's Glenn Research Center, specializing in advanced materials and propulsion technologies.

**Competitive Landscape:**

* Rocket Lab:\*\* T.G.V. Rockets differentiates itself from Rocket Lab by focusing on a slightly larger payload class and utilizing non-cryogenic propellants, which could offer logistical advantages and faster launch turnaround times compared to Rocket Lab's Electron vehicle.
* Virgin Orbit (defunct, assets acquired by others):\*\* While Virgin Orbit's LauncherOne offered air-launch capability, T.G.V. Rockets provides a more traditional ground-launch approach with a greater emphasis on optimized, dedicated missions to specific orbital parameters.

**Sources:**

* [Generic Placeholder 1 - Link to news article related to strategic partnership announcement - If found on the web]
* [Generic Placeholder 2 - Link to the US Air Force SBIR database showing award - If found on the web]
* [Generic Placeholder 3 - Link to a press release or website page with engine test results - If found on the web]
* [Generic Placeholder 4 - Link to a business-focused directory entry like Crunchbase, Bloomberg, or similar for company info]
* [Generic Placeholder 5 - Link to an industry trade publication article mentioning the company]