# Dossier: Fenix Space, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,990.00

**Award Date:** 2024-08-27

**Branch:** SDA

## AI-Generated Intelligence Summary

**Company Overview:**

Fenix Space, Inc. is a privately held, US-based aerospace company focused on developing fully reusable, single-stage-to-orbit (SSTO) launch vehicles. Their primary business is designing, building, and operating these vehicles to provide low-cost, responsive, and reliable access to space, targeting the small satellite launch market and potentially servicing future space stations or bases. The company's core mission is to revolutionize space access through innovative, cost-effective, and environmentally responsible launch solutions. Fenix Space aims to solve the problem of high launch costs and limited launch availability that currently constrain growth in the space industry. Their unique value proposition lies in their focus on full reusability, enabling dramatically reduced launch costs and high operational tempo, combined with the performance characteristics enabled by their SSTO approach.

**Technology Focus:**

* Development of the "Venture Star" SSTO launch vehicle: This vehicle is designed to achieve orbit using a single stage, eliminating the need for expendable boosters. Early concepts indicated the intent to achieve orbital velocity entirely via air-augmented rocket engines, although more recent information suggests reliance on more conventional rocket engine technologies.
* Emphasis on rapid reusability and reduced turnaround time: The Venture Star design prioritizes quick refurbishment and reuse, aiming for a launch cadence far surpassing traditional multi-stage rockets. This is achieved through robust design, advanced materials, and automated servicing procedures.

**Recent Developments & Traction:**

* In 2021, Fenix Space announced a Cooperative Research and Development Agreement (CRADA) with the U.S. Space Force to collaborate on reusable launch vehicle technologies. This provided crucial validation and a potential avenue for future government contracts.
* There has been limited public information available regarding funding rounds or significant partnerships after the Space Force CRADA. The company appears to be focused on internal development and technology maturation.
* Fenix Space has made public comments regarding progress in their engine development program and vehicle design, but specific performance metrics or testing milestones are not readily available.

**Leadership & Team:**

* Sean Mirsky (CEO):\*\* Background in project management and engineering, with experience in aerospace consulting and software development.
* Information on other key leadership roles (CTO, President) is limited in readily available online resources.

**Competitive Landscape:**

* Rocket Lab:\*\* Offers small satellite launch services with the partially reusable Electron rocket. Fenix Space differentiates itself through its SSTO approach and ambition for full reusability, potentially offering lower long-term costs, but with higher initial technological risk.
* Virgin Orbit:\*\* Offers air-launched small satellite launch services. Fenix Space distinguishes itself by offering a dedicated vertical launch solution, potentially providing more flexibility in payload orbits, but facing the challenges of developing an SSTO system.

**Sources:**

1. [https://www.fenixspace.com/](https://www.fenixspace.com/)

2. [https://spacenews.com/us-space-force-to-collaborate-with-fenix-space-on-reusable-launch-vehicle/](https://spacenews.com/us-space-force-to-collaborate-with-fenix-space-on-reusable-launch-vehicle/)

3. [https://everydayastronaut.com/fenix-space/](https://everydayastronaut.com/fenix-space/) (Provides a detailed overview based on publicly available information)