# Dossier: X-BOW LAUNCH SYSTEMS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $14,942,809.12

**Award Date:** 2024-02-15

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

X-Bow Launch Systems Inc. is a New Mexico-based space technology company focused on designing, developing, and manufacturing affordable, reliable, and rapidly deployable launch systems for space access. Their core mission is to democratize access to space by dramatically reducing the cost and complexity of orbital launch services, enabling broader participation in space-based activities for research, national security, and commercial applications. They aim to solve the problem of high launch costs and limited launch availability that currently restrict the growth of the space economy, particularly for small satellite deployments and responsive launch capabilities. Their unique value proposition lies in their use of additive manufacturing, innovative solid rocket motor design (utilizing lightweight composite materials and potentially novel propellant formulations), and streamlined operations to achieve significant cost savings and faster launch cadences compared to traditional launch providers.

**Technology Focus:**

* Develops and manufactures a modular, solid-propellant rocket motor called "Bolt," designed for scalable thrust levels and adaptable configurations, potentially allowing for a wide range of payload capacities.
* Leverages additive manufacturing (3D printing) techniques to produce rocket motor components, reducing manufacturing time and cost compared to traditional manufacturing methods. This includes research into innovative propellant binders and casings.

**Recent Developments & Traction:**

* April 2023:\*\* Awarded a $2.5 million Space Force contract to develop and test solid rocket motor technology.
* September 2022:\*\* Successfully completed a suborbital test flight of their Pathfinder I rocket at Spaceport America.
* November 2021:\*\* Announced a partnership with Spaceport America to conduct further launch activities and rocket development.

**Leadership & Team:**

* Jason Hundley (CEO):\*\* Experienced executive with a background in aerospace engineering and business development, including previous roles at Spaceport America.
* Mark Hemphill (CTO):\*\* Possesses significant expertise in rocket propulsion systems and additive manufacturing technologies. Details on his specific prior roles are scarce from publicly available information.

**Competitive Landscape:**

* Rocket Lab:\*\* While Rocket Lab primarily focuses on liquid-fueled rockets, it competes in the small satellite launch market. X-Bow differentiates itself through its emphasis on solid-propellant technology and potentially lower launch costs.
* Virgin Orbit (Bankruptcy Filing):\*\* Previously a competitor in the air-launched small satellite market. X-Bow's ground-launched approach potentially offers greater operational flexibility and scalability.

**Sources:**

* [https://xbowsystems.com/](https://xbowsystems.com/)
* [https://spacenews.com/x-bow-systems-wins-space-force-contract-to-develop-solid-rocket-motor-technology/](https://spacenews.com/x-bow-systems-wins-space-force-contract-to-develop-solid-rocket-motor-technology/)
* [https://www.spaceportamerica.com/2022/09/12/x-bow-systems-completes-pathfinder-i-flight-at-spaceport-america/](https://www.spaceportamerica.com/2022/09/12/x-bow-systems-completes-pathfinder-i-flight-at-spaceport-america/)
* [https://www.kob.com/new-mexico-news/spaceport-america-hosts-successful-rocket-launch/](https://www.kob.com/new-mexico-news/spaceport-america-hosts-successful-rocket-launch/)