# Dossier: Astroport Space Technologies, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,814.00

**Award Date:** 2023-08-31

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Astroport Space Technologies, Inc. focuses on developing lunar infrastructure, primarily through the design and construction of autonomous robotic systems for in-situ resource utilization (ISRU) on the Moon. Their core mission is to enable a sustainable lunar economy by creating the fundamental infrastructure necessary for long-term human presence and resource exploitation. They aim to solve the high cost and logistical challenges of transporting materials from Earth to the Moon by enabling the local production of critical resources like lunar regolith-based building materials and eventually extracting water ice. Their unique value proposition lies in offering a complete, end-to-end solution for lunar surface construction, combining proprietary robotics, advanced materials science, and autonomous operation capabilities.

**Technology Focus:**

* Lunar Regolith Processing and Binding:\*\* Developing methods and technologies to process lunar regolith and bind it into usable construction materials like bricks, landing pads, and habitats. They are researching various binding agents, including sulfur concrete and geopolymer concrete alternatives, potentially sourced from the Moon.
* Autonomous Robotics for Lunar Construction:\*\* Designing and building specialized robotic systems for excavating, transporting, processing, and placing lunar regolith materials. These robots are designed for autonomous operation in the harsh lunar environment.

**Recent Developments & Traction:**

* NASA SBIR Contracts:\*\* Awarded multiple NASA Small Business Innovation Research (SBIR) contracts for the development of lunar surface construction technologies, including lunar landing pad construction methods. This involves research and development of techniques to stabilize lunar regolith and prevent plume impingement during landing.
* Partnerships with Universities:\*\* Collaborations with universities for research and development of innovative materials and robotic systems. These partnerships likely involve testing and validation of their technologies in simulated lunar environments.
* 2023 SEED round:\*\* Raised a seed funding round in early 2023 to accelerate technology development and expand their team, specifics of funding are unknown, but investors included followers of Moonshots and the new space economy.

**Leadership & Team:**

* Sam Ximenes (CEO):\*\* Experienced entrepreneur with a background in technology and business development.
* (Information regarding CTO/President is not readily available through web search and may be proprietary.)\*\*

**Competitive Landscape:**

* ICON:\*\* ICON is developing 3D printing technology for terrestrial and potentially extraterrestrial construction, including projects related to habitat development. Astroport differentiates itself by focusing specifically on autonomous robotic systems tailored to ISRU and lunar surface construction, whereas ICON's focus is more broadly on 3D printing for a variety of construction applications.
* Redwire Space:\*\* Redwire Space is engaged in a range of space infrastructure activities, including in-space manufacturing and lunar surface operations. Astroport distinguishes itself through its narrower focus on lunar surface construction using ISRU techniques, offering a more specialized solution.

**Sources:**

1. [https://astroport.space/](https://astroport.space/)

2. [https://www.nasa.gov/directorates/spacetech/home/sbir/](https://www.nasa.gov/directorates/spacetech/home/sbir/)

3. [https://www.space.com/](https://www.space.com/) (Search for "Astroport Space Technologies" for relevant articles, though specific article links may change.)