# Dossier: KATALYST SPACE TECHNOLOGIES, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,811.00

**Award Date:** 2024-05-14

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Katalyst Space Technologies, LLC, based in Albuquerque, New Mexico, specializes in developing and deploying rapidly manufacturable and scalable space infrastructure solutions, specifically focused on in-space services like large-area structures and propulsion systems. Their primary mission is to enable a more sustainable and affordable space economy by reducing the cost and lead time associated with building and deploying large space assets. They aim to solve the challenges associated with current launch limitations and the high cost of deploying large, complex structures in space, such as solar power satellites, communication antennas, and space-based manufacturing facilities. Their unique value proposition lies in their patented, rapidly deployable, high-performance, and cost-effective expandable structures and their focus on in-space servicing, assembly, and manufacturing (ISAM) technologies.

**Technology Focus:**

* MegaFlex Deployable Structures:\*\* Katalyst offers a unique deployable structure technology called MegaFlex, which allows for the packaging and deployment of very large area surfaces (hundreds to thousands of square meters) from compact stowed configurations. The technology relies on specialized materials and deployment mechanisms to achieve high stiffness and precise shape control after deployment.
* Electrospray Propulsion:\*\* They are developing electrospray propulsion systems for small satellites and space tugs, focusing on high-efficiency and long-duration missions. These systems are designed to provide precise orbit control and maneuvering capabilities, enabling complex in-space operations.

**Recent Developments & Traction:**

* $10.5 Million Seed Funding:\*\* In November 2022, Katalyst Space Technologies announced a $10.5 million seed funding round led by Lockheed Martin Ventures and participation from Draper, Space Capital, and others. This funding is aimed at scaling up manufacturing capabilities and advancing their deployable structure and propulsion technologies.
* Strategic Partnership with Lockheed Martin:\*\* Concurrent with the seed funding announcement, Katalyst formalized a strategic partnership with Lockheed Martin to collaborate on advanced space infrastructure technologies and explore potential applications of Katalyst’s deployable structures and propulsion systems.
* AFWERX STTR Phase II Award:\*\* Katalyst received a Phase II Small Business Technology Transfer (STTR) award from AFWERX, the innovation arm of the U.S. Air Force, to further develop their deployable structure technology for defense applications.

**Leadership & Team:**

* Steve Toth, CEO:\*\* Extensive experience in the aerospace industry with a background in program management, engineering, and business development.
* Dr. Hunter Mccurdy, CTO:\*\* Expertise in advanced materials, structural dynamics, and deployable structures.

**Competitive Landscape:**

* Redwire Corporation:\*\* Redwire is a major player in the in-space manufacturing and on-orbit servicing market, offering a wide range of capabilities including deployable structures and robotic assembly. Katalyst differentiates itself through its focus on rapid manufacturability, cost-effectiveness, and the unique MegaFlex technology.
* L3Harris Technologies:\*\* L3Harris has a significant presence in space systems, including deployable antennas and structures. Katalyst's differentiator lies in its specialization in rapidly deployable, high-performance large-area structures coupled with its electrospray propulsion capabilities, offering a more integrated and streamlined solution for certain applications.

**Sources:**

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

2. [https://www.lockheedmartin.com/en-us/news/2022/katalyst-space-technologies-seed-funding.html](https://www.lockheedmartin.com/en-us/news/2022/katalyst-space-technologies-seed-funding.html)

3. [https://spacecapital.com/portfolio/katalyst-space-technologies](https://spacecapital.com/portfolio/katalyst-space-technologies)

4. [https://www.crunchbase.com/organization/katalyst-space-technologies](https://www.crunchbase.com/organization/katalyst-space-technologies)

5. [https://www.draper.com/news/draper-ventures-invests-katalyst-space-technologies](https://www.draper.com/news/draper-ventures-invests-katalyst-space-technologies)