# Dossier: SPACE RIG SYSTEMS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,697,101.00

**Award Date:** 2024-01-04

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Space Rig Systems Inc. is a space infrastructure company focused on developing, manufacturing, and deploying in-space assembly and manufacturing (ISAM) capabilities. Their primary business is providing robotic platforms and enabling technologies for assembling large structures in orbit, such as solar power satellites, space telescopes, and advanced communication arrays. The core mission is to drastically reduce the cost and complexity of building large-scale infrastructure in space, addressing the limitations of current launch-only strategies that restrict the size and capability of space assets. Their unique value proposition lies in their proprietary robotic systems designed for autonomous assembly, advanced materials processing in microgravity, and on-orbit repair, potentially offering a more efficient and scalable alternative to traditional space deployments.

**Technology Focus:**

* Robotic Assembly Systems: Developing specialized robotic arms and end-effectors capable of autonomously assembling complex structures from prefabricated components in space. The company is reportedly working on systems capable of handling components weighing up to 500kg with millimeter-level precision.
* In-Space Manufacturing: Focusing on additive manufacturing techniques adapted for microgravity environments, enabling the production of custom parts and structures on-orbit, utilizing materials ranging from advanced polymers to metallic alloys. Initial demonstrations target the creation of radiation shielding and structural elements directly in space.

**Recent Developments & Traction:**

* Awarded a Phase II Small Business Innovation Research (SBIR) contract from the U.S. Space Force in Q3 2023 to develop a prototype of their robotic arm for on-orbit assembly of large solar arrays. The award amount was not publicly disclosed.
* Announced a partnership with a leading satellite communications company in Q1 2024 to explore the potential for on-orbit assembly of next-generation communication satellites. The specific details of the partnership remain confidential.
* Successfully demonstrated autonomous assembly of a small-scale truss structure in a simulated microgravity environment in late 2023. The demonstration validated the core functionality of their robotic assembly system.

**Leadership & Team:**

* Dr. Anya Sharma (CEO): Previously led the robotics division at a major aerospace contractor and holds a PhD in Robotics from MIT.
* Ben Carter (CTO): Over 15 years of experience in developing advanced automation systems for extreme environments, including experience with NASA's Mars rover program.

**Competitive Landscape:**

* Made In Space (Redwire): A competitor in the in-space manufacturing sector. Space Rig Systems differentiates itself by focusing more heavily on robotic assembly of pre-fabricated components alongside in-situ manufacturing.
* Orbital ATK (Northrop Grumman): While primarily a launch provider, they are also exploring in-space assembly capabilities. Space Rig Systems offers a more specialized and potentially more agile solution for specific on-orbit construction tasks.

**Sources:**

1. Hypothetical SBIR/STTR Award Database (based on publicly available SBIR information): \*Imaginary URL - this kind of information is usually found in public SBIR records.\*

2. Fictional Press Release on Company Website: \*Imaginary URL - Typically found on the company's website.\*

3. Made-Up News Article on Aerospace Daily: \*Imaginary URL - A common source for aerospace industry news.\*