# Dossier: SPACEWORKS ENTERPRISES INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $2,999,888.00

**Award Date:** 2024-08-28

**Branch:** DARPA

## AI-Generated Intelligence Summary

**Company Overview:**

SpaceWorks Enterprises Inc. is a leading aerospace engineering firm specializing in advanced concept design, technology development, and economic analysis for both government and commercial clients. Their primary business revolves around providing innovative solutions for challenging problems in space access, in-space operations, and advanced manufacturing. The company’s core mission is to enable the future of space exploration and utilization through cutting-edge research and development. They aim to solve key challenges such as reducing the cost of space transportation, developing more efficient and reliable spacecraft propulsion systems, enabling in-space resource utilization, and creating advanced materials and manufacturing techniques applicable to space environments. SpaceWorks' unique value proposition lies in its ability to blend theoretical analysis with practical engineering expertise, resulting in tangible solutions that address real-world challenges and drive innovation in the aerospace sector. They also provide strategic consulting related to emerging markets in space.

**Technology Focus:**

* Low-Cost Space Access:\*\* Development of technologies and concepts to dramatically reduce the cost of launching payloads into space. This includes research into advanced propulsion systems, reusable launch vehicle designs, and innovative mission architectures. An example is their work on a Small Launch Vehicle (SLV) utilizing hybrid propulsion.
* In-Space Operations:\*\* Focus on technologies that enable long-duration human spaceflight and robotic missions beyond Earth orbit. This includes research into advanced life support systems, radiation shielding, in-space resource utilization (ISRU), and autonomous spacecraft operations.

**Recent Developments & Traction:**

* NASA NIAC Awards:\*\* Awarded multiple NASA Innovative Advanced Concepts (NIAC) Phase I and Phase II studies focusing on revolutionary aerospace concepts. Recent awards include those exploring advanced propellant depot concepts and novel propulsion methods.
* SBIR/STTR Contracts:\*\* Regularly awarded Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) contracts from NASA and other government agencies, focusing on various aspects of space technology development.
* Development of DARPA Glide Breaker Concepts:\*\* SpaceWorks participated in DARPA's Glide Breaker program, exploring technologies for intercepting hypersonic weapons.

**Leadership & Team:**

* Dr. John Rusek (President):\*\* A recognized expert in advanced aerospace systems, with extensive experience in conceptual design, systems analysis, and technology development.
* Dr. Robert Hoyt (CEO):\*\* Seasoned aerospace engineer and entrepreneur with a background in advanced propulsion systems and space mission design. Previously involved with Tethers Unlimited, another space tech company.

**Competitive Landscape:**

* Sierra Space:\*\* Sierra Space focuses on building a space station and reusable spaceplanes, which competes with SpaceWorks' space access-related research and development.
* Blue Origin:\*\* While broader in scope, Blue Origin's work on reusable launch vehicles directly competes with SpaceWorks' efforts to reduce the cost of space access. SpaceWorks differentiates itself through its focus on advanced concepts and earlier-stage research, often working on technologies that are not yet commercially viable but have the potential for significant impact in the future.

**Sources:**

1. [https://www.spaceworks.aero/](https://www.spaceworks.aero/)

2. [https://www.nasa.gov/directorates/spacetech/niac/2023\_Phase\_I/](https://www.nasa.gov/directorates/spacetech/niac/2023\_Phase\_I/) (Example of NASA NIAC Award)

3. [https://www.sbir.gov/](https://www.sbir.gov/) (Search results related to SpaceWorks for SBIR/STTR awards)

4. [https://www.rocketstem.org/2016/08/18/spaceworks-ceo-discusses-future-space-travel/](https://www.rocketstem.org/2016/08/18/spaceworks-ceo-discusses-future-space-travel/) (Interview providing insight into the company's vision)