# Dossier: COGNITIVE SPACE, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,731.00

**Award Date:** 2023-08-25

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Cognitive Space, Inc. is a software company providing advanced mission planning and optimization solutions for satellite constellations, particularly those used for Earth observation, communications, and national security. Its core mission is to enhance the efficiency, resilience, and autonomy of space-based assets by applying artificial intelligence (AI) and machine learning (ML) to complex resource management challenges. Cognitive Space aims to solve the problem of inefficient satellite operations planning, which typically involves manual processes and suboptimal resource allocation. Their unique value proposition lies in their ability to automate and optimize mission planning for dynamic space environments, enabling operators to maximize data collection, minimize latency, and respond effectively to changing priorities.

**Technology Focus:**

* Astraea™:\*\* A software platform employing AI and ML algorithms to automate and optimize satellite tasking, scheduling, and downlink planning. It dynamically manages competing requests for satellite resources and prioritizes tasks based on mission objectives, weather conditions, and other constraints.
* Advanced Modeling and Simulation:\*\* Development of high-fidelity models of space assets, communication networks, and environmental conditions to simulate complex scenarios and optimize satellite operations in a virtual environment. This includes predictive analytics for anomaly detection and proactive maintenance.

**Recent Developments & Traction:**

* SBIR Phase III Award (2023):\*\* Cognitive Space received a Phase III Small Business Innovation Research (SBIR) award. Details on the specific awarding agency and amount are scarce, but SBIR Phase III indicates the technology is transitioning to commercialization and government use.
* Partnerships with Government Agencies:\*\* The company is actively working with various US government agencies on projects related to space domain awareness and satellite operations. Specific details are often confidential.
* Software Updates:\*\* Regularly releases updates to the Astraea platform with improved algorithms, enhanced user interfaces, and expanded functionality for managing different types of satellite payloads.

**Leadership & Team:**

* Scott Herman (CEO):\*\* Background in business strategy and technology commercialization with prior experience in the aerospace industry.
* Shankar Nagaraja (CTO):\*\* PhD in Aerospace Engineering with expertise in satellite dynamics, optimization, and AI. Has a strong track record of developing and deploying complex software systems.

**Competitive Landscape:**

* Kayhan Space:\*\* Offers a SaaS platform for space traffic management and collision avoidance. Cognitive Space differentiates itself by focusing more on mission planning and resource optimization, rather than solely on collision avoidance.
* Slingshot Aerospace:\*\* Provides data analytics and decision intelligence tools for space situational awareness. Cognitive Space offers a more direct focus on satellite mission planning and operational execution than the broader situational awareness focus of Slingshot.

**Sources:**

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

2. [https://www.crunchbase.com/organization/cognitive-space](https://www.crunchbase.com/organization/cognitive-space)

3. [https://www.linkedin.com/company/cognitive-space/](https://www.linkedin.com/company/cognitive-space/)