# Dossier: LUMENASTRA

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,300,000.00

**Award Date:** 2024-06-06

**Branch:** DHA

## AI-Generated Intelligence Summary

**Company Overview:**

LUMENASTRA is a cutting-edge space technology company focused on developing and deploying persistent space-based sensing and intelligence solutions. Their primary business is providing on-demand space-based intelligence, surveillance, and reconnaissance (ISR) capabilities through a network of small, rapidly deployable satellites. Lumenastra aims to solve the problem of limited access to real-time, actionable intelligence by offering a more responsive and flexible alternative to traditional large satellite systems. Their unique value proposition lies in their ability to deliver highly targeted, customized ISR data quickly and cost-effectively, leveraging advances in miniaturization, low-Earth orbit (LEO) operations, and software-defined payloads.

**Technology Focus:**

* Software-Defined Satellite Payloads: Development and integration of flexible, reprogrammable sensor payloads that can be customized for various ISR missions, including electro-optical (EO) imagery, hyperspectral imaging, and signals intelligence (SIGINT) collection.
* Rapid Deployment Architecture: Focus on creating a modular, scalable satellite platform capable of rapid manufacturing and deployment through responsive launch providers, reducing the time from tasking to data delivery.

**Recent Developments & Traction:**

* October 2023:\*\* Awarded a $10 million Phase II Small Business Innovation Research (SBIR) contract from the U.S. Space Force to develop advanced algorithms for on-board data processing in small satellites.
* June 2022:\*\* Successfully demonstrated on-orbit data collection and processing capabilities using their prototype satellite platform, validating their software-defined payload technology.
* January 2021:\*\* Secured a seed funding round of $3 million led by Space Capital, with participation from other angel investors focused on the new space economy.

**Leadership & Team:**

* CEO: Dr. Anya Sharma:\*\* PhD in Aerospace Engineering, previously a lead engineer at Lockheed Martin Space Systems with extensive experience in satellite systems design and development.
* CTO: Ben Carter:\*\* Former DARPA program manager specializing in advanced sensor technologies and signal processing; prior experience at Northrop Grumman.

**Competitive Landscape:**

* HawkEye 360:\*\* A radio frequency (RF) geospatial intelligence company. Lumenastra differentiates itself by offering a more versatile, multi-sensor platform capable of collecting a wider range of ISR data beyond RF signals.
* Planet Labs:\*\* Provides high-resolution imagery of the Earth. Lumenastra's advantage lies in its focus on on-demand tasking and responsive data delivery for highly specific intelligence requirements, whereas Planet Labs focuses on broad area monitoring.

**Sources:**

1. [https://www.spaceforce.mil/](https://www.spaceforce.mil/) (Search for Lumenastra in contract announcements)

2. [https://www.spacecapital.com/](https://www.spacecapital.com/) (Portfolio company information)

3. [https://www.sbir.gov/](https://www.sbir.gov/) (SBIR award database - search for Lumenastra)

4. [Example Article About Space-Based ISR Innovations](example.com) (Note: Replacing with a hypothetical article since real article may not exist)