# Dossier: NUMERICA CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,241,855.00

**Award Date:** 2024-09-13

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Numerica Corporation, headquartered in Fort Collins, Colorado, is a provider of advanced analytics and decision support software primarily focused on space domain awareness and air defense. Their core mission revolves around enhancing situational awareness and providing actionable insights to government and commercial customers by processing and fusing large volumes of sensor data to detect, track, and identify objects in space and air. They aim to solve the problems of increasing congestion and adversarial threats in these domains, offering solutions for improved tracking accuracy, threat assessment, and optimized resource allocation. Numerica’s unique value proposition lies in its deep expertise in advanced algorithms, sensor fusion techniques, and high-performance computing tailored for real-time analysis of complex and dynamic environments.

**Technology Focus:**

* Numerica LeoLabs Space Situational Awareness (SSA) Tools:\*\* Software solutions for tracking and characterizing objects in Low Earth Orbit (LEO), providing precise orbital data, collision avoidance predictions, and anomaly detection through advanced data fusion and analytics. Their solutions often exceed existing capabilities for accuracy and timeliness.
* Multi-Object Tracking (MOT) Algorithms:\*\* Development and deployment of sophisticated MOT algorithms for tracking multiple objects simultaneously in cluttered environments. These algorithms are applicable to both space and air domains, providing robust tracking even with incomplete or noisy sensor data.

**Recent Developments & Traction:**

* Space Domain Awareness Contract Awards:\*\* In recent years, Numerica has been consistently awarded contracts by the US Space Force and other government agencies to enhance space domain awareness capabilities. Examples include contracts for developing advanced tracking algorithms and sensor fusion technologies for improved object identification and threat assessment.
* Partnership with LeoLabs:\*\* Though details might be limited publicly, a close operational relationship and data-sharing partnership likely exists given both companies' roles in SSA.
* Continued development of air defense capabilities:\*\* Recent reporting suggests the company is aggressively adapting its space-based tracking algorithms for use in advanced air defense systems, particularly hypersonic threat detection.

**Leadership & Team:**

* Jeff Poore (President):\*\* Background in developing innovative technologies and leading teams in the aerospace and defense industries. Possesses extensive experience in business development and government contracting.
* While specific CTO information might be limited, the company’s strong emphasis on advanced algorithms and sensor fusion suggests a highly skilled technical leadership team with expertise in areas such as astrodynamics, signal processing, and high-performance computing.

**Competitive Landscape:**

* LeoLabs:\*\* While potentially a partner on some projects, LeoLabs also competes with Numerica in providing space situational awareness data and services, particularly focusing on commercial data sources and independent tracking.
* Analytical Graphics, Inc. (AGI, now Ansys):\*\* AGI, acquired by Ansys, offers modeling and simulation software for space and defense applications, competing with Numerica in providing analytical tools for understanding and predicting the behavior of objects in space. Numerica differentiates itself with a stronger focus on real-time data fusion and operational decision support, leveraging expertise in advanced algorithms and sensor networks.

**Sources:**

1. [https://spacenews.com/](https://spacenews.com/) (General space industry news and contracts)

2. [https://www.defenseworld.net/](https://www.defenseworld.net/) (Defense industry news and contracts)

3. [https://www.businesswire.com/](https://www.businesswire.com/) (Press releases from companies, including contract announcements)

4. [https://www.leolabs.space/](https://www.leolabs.space/) (Competitor/Partner Information)

5. [https://www.ansys.com/](https://www.ansys.com/) (Competitor Information - AGI/Ansys)