# Dossier: Leolabs Federal, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,245,228.00

**Award Date:** 2024-05-21

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

LeoLabs Federal, Inc. is a US-based subsidiary of LeoLabs, specializing in delivering space domain awareness (SDA) and space traffic management (STM) solutions specifically tailored for the US government and defense sectors. Their primary business is to provide comprehensive and timely tracking, identification, and characterization of objects in low Earth orbit (LEO) and beyond, addressing the increasing congestion and security risks posed by the growing number of satellites and debris in space. LeoLabs Federal aims to solve the problem of inadequate SDA capabilities by leveraging a global network of phased-array radars and advanced data analytics to provide precise and actionable information about the space environment. Their unique value proposition lies in their vertically integrated approach, combining owned and operated radar infrastructure with proprietary data processing and visualization tools to offer superior accuracy, coverage, and responsiveness compared to traditional observation methods and other SDA providers.

**Technology Focus:**

* Globally Distributed Phased-Array Radar Network:\*\* Operates a network of six (as of late 2023) high-performance phased-array radars strategically located around the world, enabling continuous tracking of objects as small as 2 cm in LEO. Provides significantly improved revisit rates and orbital determination accuracy compared to legacy tracking systems.
* Data Analytics and Visualization Platform:\*\* Proprietary software platform that ingests radar observations, processes data using advanced algorithms, and generates actionable insights for customers. Includes features for anomaly detection, collision avoidance, and object identification.

**Recent Developments & Traction:**

* Strategic Funding:\*\* Received undisclosed funding from In-Q-Tel in 2021 to support expansion and innovation in its SDA capabilities for the US Intelligence Community.
* DoD Contract Awards:\*\* Awarded multiple contracts from the US Space Force and other DoD entities for SDA services, including tracking and characterizing potential threats in space. These contracts demonstrate the company's growing role as a trusted provider of space domain awareness solutions to the US government.
* Enhanced Space Situational Awareness Capabilities:\*\* Continued to improve their radar network and data processing capabilities, resulting in enhanced accuracy and more frequent tracking of space objects. Announced improved orbit determination accuracy through advancements in their algorithm.

**Leadership & Team:**

* Dan Ceperley:\*\* CEO, LeoLabs. While Ceperley is the CEO of the parent company, LeoLabs, Inc., his leadership also oversees the strategy and direction of LeoLabs Federal. He has a background in software development and previously co-founded and led an internet company.
* The leadership of LeoLabs Federal likely includes senior personnel with backgrounds in defense contracting, space technology, and government relations. Exact leadership details for the \*Federal\* subsidiary specifically are less publicly available, indicating a tighter relationship with the overall LeoLabs team.

**Competitive Landscape:**

* Northrop Grumman:\*\* Provides a range of space situational awareness services, including satellite tracking and analysis. LeoLabs Federal differentiates itself through its focused specialization on LEO tracking using a proprietary radar network, offering potentially higher resolution and more frequent updates than Northrop Grumman's broader SDA offerings.
* Slingshot Aerospace:\*\* Another company that combines data and analytics to provide space situational awareness. Leolabs' competitive advantage lies in their ownership and operation of physical sensor assets, the radar network, rather than solely relying on data integration and analytics, giving them a more controlled and potentially more reliable data stream.

**Sources:**

1. [https://www.leolabs.space/](https://www.leolabs.space/)

2. [https://www.inqtel.com/news/in-q-tel-invests-in-leolabs/](https://www.inqtel.com/news/in-q-tel-invests-in-leolabs/)

3. [https://spacenews.com/leolabs-wins-us-space-force-contract-for-enhanced-space-domain-awareness/](https://spacenews.com/leolabs-wins-us-space-force-contract-for-enhanced-space-domain-awareness/)

4. [https://breakingdefense.com/2023/09/air-forces-commercial-ssa-contract-adds-3-new-vendors-raises-total-to-14/](https://breakingdefense.com/2023/09/air-forces-commercial-ssa-contract-adds-3-new-vendors-raises-total-to-14/)