# Dossier: THE NAVSYS CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,471,103.00

**Award Date:** 2023-03-21

**Branch:** MDA

## AI-Generated Intelligence Summary

**Company Overview:**

NAVSYS Corporation is a veteran-owned small business specializing in the development of advanced Positioning, Navigation, and Timing (PNT) technologies, especially those focused on mitigating GPS vulnerabilities. Their core mission is to provide robust, resilient, and reliable navigation solutions for military, commercial, and critical infrastructure applications in GPS-denied or degraded environments. They aim to solve the growing problem of GPS jamming, spoofing, and other forms of interference, ensuring accurate positioning and timing information is available when and where it's needed most. NAVSYS's unique value proposition lies in their expertise in sensor fusion, alternative navigation techniques (e.g., celestial navigation, inertial navigation), and their ability to integrate these technologies into customized, cost-effective solutions.

**Technology Focus:**

* GNSS Simulation & Testing:\*\* NAVSYS develops and markets the SimSAFE GNSS simulator, allowing users to simulate GPS and other GNSS signals under various environmental conditions, including jamming and spoofing attacks. The simulator can generate complex scenarios with multiple threats and moving platforms.
* Alternative Navigation Systems:\*\* NAVSYS designs and implements alternative navigation solutions leveraging inertial measurement units (IMUs), celestial sensors, and other non-GNSS sources. Their expertise includes Kalman filtering and sensor fusion algorithms to combine data from multiple sensors for optimal positioning accuracy, even in GPS-denied environments.

**Recent Developments & Traction:**

* February 2022:\*\* NAVSYS was awarded a Phase II SBIR from the US Air Force to develop a Navigation Warfare (NAVWAR) Situational Awareness Tool. This tool aims to provide real-time identification and assessment of GPS interference.
* 2021-2023:\*\* NAVSYS demonstrated and deployed its alternative navigation systems in various military exercises, showcasing its ability to maintain positioning accuracy in GPS-denied scenarios. While specific contract details are not publicly available, the company has consistently highlighted its involvement in DoD programs.
* Ongoing R&D:\*\* The company continues to develop new algorithms and sensor fusion techniques for enhanced PNT resilience, evidenced by numerous technical publications and presentations.

**Leadership & Team:**

* Alison Brown, President and CEO:\*\* Dr. Brown is a recognized expert in GNSS technology and has over 30 years of experience in the field. She is actively involved in industry standards organizations and has a strong track record of innovation in PNT.
* Based on available information, other key team members likely possess advanced degrees and/or extensive experience in relevant areas such as electrical engineering, computer science, and aerospace engineering. While specific names beyond Dr. Brown are less prominently featured, the company's success is attributed to a team of skilled engineers and scientists.

**Competitive Landscape:**

* Orolia (Safran):\*\* Orolia offers a range of PNT solutions, including resilient GNSS receivers and alternative navigation systems, and is a major player in the defense and aerospace sectors.
* NovAtel (Hexagon):\*\* NovAtel provides high-precision GNSS positioning technology and solutions.

NAVSYS differentiates itself through its focus on cost-effective, customized solutions tailored to specific customer needs, and their expertise in sensor fusion and alternative navigation techniques, especially those involving celestial navigation (a more niche area). Their smaller size and SBIR-driven innovation also allow them to be more agile and responsive compared to larger competitors.

**Sources:**

1. [https://navsys.com/](https://navsys.com/)

2. [https://www.sbir.gov/sbirsearch/detail/2187938](https://www.sbir.gov/sbirsearch/detail/2187938)

3. [https://www.gps.gov/](https://www.gps.gov/) (While not directly about NAVSYS, provides context on the GPS landscape and government initiatives related to PNT resilience).