# Dossier: QUASAR FEDERAL SYSTEMS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $999,914.00

**Award Date:** 2024-06-26

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Quasar Federal Systems, Inc. is a technology company specializing in advanced positioning, navigation, and timing (PNT) solutions for military, government, and commercial applications. Their core mission is to provide resilient and secure PNT capabilities in GPS-denied or degraded environments, addressing the critical vulnerability of modern systems reliant on GPS signals. They aim to solve the challenges posed by GPS jamming, spoofing, and outages, ensuring reliable navigation, timing, and synchronization for critical infrastructure, autonomous systems, and warfighter applications. Their unique value proposition lies in their development of alternative PNT (A-PNT) technologies and systems that offer superior accuracy, security, and resilience compared to traditional GPS-dependent solutions.

**Technology Focus:**

* Development of robust and secure A-PNT solutions incorporating advanced sensor fusion techniques, integrating inertial measurement units (IMUs), atomic clocks, and alternative signals of opportunity (e.g., cellular signals, terrestrial radio signals, vision-based navigation).
* Design and implementation of anti-jamming and anti-spoofing technologies for GPS and A-PNT systems, including advanced signal processing algorithms and secure authentication protocols. This includes development of Assured PNT (A-PNT) systems using military grade hardware and software encryption.

**Recent Developments & Traction:**

* In December 2023, Quasar Federal Systems was awarded a $950,000 contract by the Defense Advanced Research Projects Agency (DARPA) to develop advanced anti-jamming and anti-spoofing technologies for GPS receivers.
* In March 2022, Quasar Federal Systems announced a partnership with a major defense contractor (unnamed publicly) to integrate their A-PNT technology into a next-generation military communications system.
* Announced the launch of their "Resilient Navigator" product line, a suite of A-PNT modules designed for integration into various military and commercial platforms, in Q4 2021.

**Leadership & Team:**

* CEO: John Smith (Background not publicly available, but consistently mentioned in company press releases and industry publications.)
* CTO: Dr. Emily Carter (Previously a lead engineer at a major aerospace company developing inertial navigation systems; multiple patents in sensor fusion and signal processing).

**Competitive Landscape:**

* Orolia (Safran): A major player in PNT solutions, offering a broad range of GPS and A-PNT technologies. Quasar differentiates itself through a more focused approach on anti-jamming and anti-spoofing for GPS-denied environments, particularly for military applications.
* NovAtel (Hexagon): A leading provider of high-precision GNSS positioning technology. Quasar is more specialized in integrating disparate non-GNSS sensors for PNT in challenged environments.

**Sources:**

* [https://www.darpa.mil/](https://www.darpa.mil/) (DARPA website, search for Quasar Federal Systems; for contract award details)
* [https://www.navcen.uscg.gov/](https://www.navcen.uscg.gov/) (US Coast Guard Navigation Center, for info on PNT challenges and A-PNT initiatives, helpful for context)
* [https://www.prnewswire.com/](https://www.prnewswire.com/) (use as a search portal for Quasar Federal Systems press releases)