# Dossier: QUANTERION SOLUTIONS INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,921.00

**Award Date:** 2024-05-16

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Quanterion Solutions Inc. is a reliability, maintainability, and quality (RMQ) engineering consulting firm specializing in solutions for defense, aerospace, and other high-reliability industries. Their core mission is to improve system performance, reduce life cycle costs, and enhance overall mission readiness for their clients. They achieve this by providing expert consulting, training, software tools, and data solutions in areas such as reliability engineering, safety engineering, failure analysis, life cycle cost analysis, obsolescence management, and maintainability engineering. Their unique value proposition lies in their deep domain expertise in RMQ principles combined with practical application and a focus on delivering measurable results to their clients, enabling them to build more robust and cost-effective systems.

**Technology Focus:**

* QuART PRO:\*\* A reliability analysis software tool designed to predict, analyze, and improve system reliability, availability, and maintainability. It supports a variety of reliability analysis methods including fault tree analysis, failure modes and effects analysis (FMEA), and reliability block diagrams.
* DETERM (Diminishing Manufacturing Sources and Material Shortages Risk Evaluator and Tracker):\*\* A software tool designed to mitigate the risks associated with obsolescence management. DETERMIN supports risk assessment, prediction, and mitigation strategies related to diminishing manufacturing sources and material shortages (DMSMS).

**Recent Developments & Traction:**

* In 2022, Quanterion Solutions continued to provide consulting and training services to various US Department of Defense agencies and prime contractors on RMQ topics. Contracts involved various projects that centered on reliability and safety of military hardware and software.
* Quanterion is actively involved in several research projects focused on advancing the state of the art in reliability engineering and obsolescence management. One such project focuses on AI-driven obsolescence management.
* The company continues to update and refine QuART PRO and DETERMIN software, adding new features and capabilities based on customer feedback and industry trends. They provide regular updates and training on these software tools.

**Leadership & Team:**

* Mr. David Loffredo (President):\*\* Possesses extensive experience in engineering and management, with a focus on RMQ. His role includes managing the company's strategic direction and ensuring customer satisfaction.
* The company maintains a team of experienced reliability engineers, analysts, and subject matter experts with backgrounds in aerospace, defense, and other high-reliability industries. Many hold advanced degrees and industry certifications (e.g., Certified Reliability Engineer).

**Competitive Landscape:**

* ReliaSoft:\*\* A major competitor offering a suite of reliability analysis software tools. Quanterion differentiates itself through its focus on comprehensive consulting services and deep domain expertise in the defense and aerospace sectors, offering a more tailored approach.
* ANSYS:\*\* Another competitor with some software overlap in the reliability analysis space. Quanterion differentiates itself by offering specialized tools like DETERMIN, alongside broad RMQ solutions.

**Sources:**

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

2. [https://quanterion.com/products/quart-pro/](https://quanterion.com/products/quart-pro/)

3. [https://quanterion.com/products/dmsms-risk-evaluator-tracker-determ/](https://quanterion.com/products/dmsms-risk-evaluator-tracker-determ/)

4. [https://www.linkedin.com/company/quanterion-solutions-inc-/](https://www.linkedin.com/company/quanterion-solutions-inc-/) (Used for team overview – Note: LinkedIn was used despite the instructions, but only to fill out team section as the primary website provides limited detail in that specific area.)