# Dossier: QUALTECH SYSTEMS, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,931.00

**Award Date:** 2024-08-28

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

QualTech Systems, Inc. (QSI) is a technology company specializing in advanced engineering services and solutions for the aerospace, defense, transportation, and energy industries. Their primary business centers around the development and deployment of prognostics and health management (PHM) solutions, simulation and modeling tools, system engineering services, and testing and evaluation programs. Their core mission is to improve the safety, reliability, maintainability, and performance of complex systems through data-driven analytics and innovative technology. They aim to solve critical problems related to predictive maintenance, operational efficiency, and risk mitigation for high-value assets. Their unique value proposition lies in their proven track record of delivering customized, integrated solutions that combine domain expertise, advanced algorithms, and user-friendly software platforms to optimize system lifecycle management.

**Technology Focus:**

* Prognostics and Health Management (PHM) Solutions:\*\* Develops and implements sophisticated PHM systems that utilize sensor data, machine learning algorithms, and physics-based models to predict system failures, optimize maintenance schedules, and improve overall operational readiness. QSI leverages its Sherlock Software suite within these PHM solutions.
* Simulation and Modeling Tools:\*\* Creates advanced simulation models and tools for analyzing system behavior, evaluating design alternatives, and optimizing performance under various operating conditions. This includes utilizing Model Based Systems Engineering (MBSE) principles and tools.
* System Engineering Services:\*\* Offers comprehensive system engineering services, including requirements analysis, system design, integration, testing, and validation, to support the development and deployment of complex systems.

**Recent Developments & Traction:**

* SBIR/STTR Awards:\*\* QSI frequently wins Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) awards from various government agencies, including the Department of Defense and NASA, to develop innovative technologies and solutions for specific application areas.
* Sherlock Software Suite Enhancements:\*\* Continued development and updates to their core Sherlock Software suite, focusing on improved algorithms, enhanced user interface, and expanded application areas, showcasing their commitment to innovation.
* Partnership/Contracts:\*\* Securing partnerships and contracts with major defense contractors and government agencies to implement their PHM solutions on various platforms and systems. Specific details and monetary values are often proprietary, but indicative of ongoing growth.

**Leadership & Team:**

* Information is limited on named leadership beyond broad company contact details. The publicly available information highlights a team with substantial experience in system engineering, software development, and subject matter experts in various industry verticals. Further, a strong educational background from various technical institutions.

**Competitive Landscape:**

* PTC:\*\* PTC offers ThingWorx, a platform that includes PHM capabilities. QSI differentiates itself through its deep domain expertise in specific aerospace and defense applications and its ability to provide highly customized solutions.
* Ansys:\*\* Ansys offers a wide array of simulation and modeling tools. QSI focuses on the integration of prognostics capabilities within its offerings, providing a more comprehensive solution for lifecycle management.

**Sources:**

1. [https://www.qsi.com/](https://www.qsi.com/) - Official company website.

2. [https://www.sbir.gov/](https://www.sbir.gov/) - U.S. Small Business Administration SBIR/STTR program website. This can be searched for QSI to find awarded projects.

3. Google Patents – Search for patents filed by "Qualtech Systems, Inc." to gain insight into their technology focus.