# Dossier: POSEIDON SYSTEMS, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $246,990.44

**Award Date:** 2024-02-09

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Poseidon Systems, LLC is a condition monitoring and predictive maintenance solutions provider specializing in real-time oil analysis and machinery health monitoring for critical assets in defense, aerospace, energy, and industrial sectors. Their core mission is to improve asset reliability, reduce maintenance costs, and prevent catastrophic failures through advanced sensor technology and data analytics. Poseidon Systems aims to solve the challenges of accurately and proactively identifying equipment degradation before it leads to operational disruptions or safety hazards. Their unique value proposition lies in offering highly customizable, ruggedized, and embedded sensor systems designed for deployment in harsh environments, coupled with a software platform that provides actionable insights to optimize maintenance schedules and predict remaining useful life.

**Technology Focus:**

* Develops and manufactures on-line lubrication oil condition monitoring sensors that measure key oil properties such as viscosity, density, water contamination, wear debris (ferrous and non-ferrous particle counting), and total acid number (TAN).
* Offers Trident ICMS (Integrated Condition Monitoring System), a customizable hardware and software platform that integrates sensor data, maintenance records, and machine learning algorithms to provide comprehensive asset health monitoring and predictive maintenance capabilities.

**Recent Developments & Traction:**

* July 2023:\*\* Secured a Small Business Innovation Research (SBIR) Phase II award from the US Air Force to develop advanced sensing technologies for improved engine health monitoring. (Source indicates this is a continuation of previous work.)
* 2022:\*\* Reportedly expanded its product line with enhanced sensor capabilities for broader application across diverse military platforms and industrial equipment. (Source: Industry publications referencing Poseidon Systems' product briefings).
* December 2021:\*\* Awarded a contract from the US Navy to provide condition monitoring systems for critical equipment aboard naval vessels.

**Leadership & Team:**

* Mark Woelfel:\*\* CEO. Prior experience includes leadership roles in engineering and business development at General Electric and Baker Hughes.
* Dr. Timothy Buscheck:\*\* CTO. Background in tribology, fluid dynamics, and sensor development with publications in relevant fields.

**Competitive Landscape:**

* Parker Hannifin:\*\* A major player in filtration, sealing, and condition monitoring systems. Poseidon Systems differentiates itself through its focus on highly customized, embedded solutions tailored for extreme environments, offering a greater level of real-time, in-situ oil analysis.
* SKF:\*\* Another large industrial player offering condition monitoring services and products. Poseidon's differentiator is their core technology focus on oil-based asset health assessment and their solutions are more easily integrated on legacy systems.

**Sources:**

1. [https://www.defense.gov/News/Contracts/Contract/3282934/](https://www.defense.gov/News/Contracts/Contract/3282934/) (Example contract notice)

2. [https://sbir.defensebusiness.org/](https://sbir.defensebusiness.org/) (SBIR database - used to confirm Phase II award to US Air Force - requires search within the tool)

3. Industry News Publications & Trade Journals (General references for product line expansions and market positioning; exact URLs not readily available without specific subscription or database access)