# Dossier: SEACLAID, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $142,893.97

**Award Date:** 2023-03-28

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

SEACLAID, LLC is a defense technology company specializing in the development and deployment of advanced undersea warfare solutions. Their primary business revolves around enhancing maritime domain awareness and anti-submarine warfare (ASW) capabilities for the US Navy and its allies. Their core mission is to provide innovative acoustic signal processing, sensor technology, and autonomous system integration that addresses the growing challenges of modern submarine threats and complex underwater environments. SEACLAID aims to solve the problem of effectively detecting, tracking, and identifying quiet, advanced submarines in cluttered littoral environments by leveraging cutting-edge signal processing algorithms and autonomous platforms. Their unique value proposition lies in their ability to integrate and optimize existing ASW assets with novel, rapidly deployable solutions, offering a cost-effective and adaptable approach to maritime security.

**Technology Focus:**

* Development of advanced passive acoustic signal processing algorithms for submarine detection and classification. These algorithms are designed to extract weak and obscured acoustic signatures from background noise and clutter, improving the effectiveness of existing sonar systems.
* Autonomous Underwater Vehicle (AUV) integration with advanced acoustic sensors and data processing capabilities for persistent surveillance and ASW missions. This includes developing communication protocols and navigation systems enabling coordinated operations between multiple AUVs and surface platforms.

**Recent Developments & Traction:**

* In September 2022, SEACLAID was awarded a Phase II Small Business Innovation Research (SBIR) grant from the Department of the Navy to develop and demonstrate an advanced acoustic processing technique. This grant follows a successful Phase I effort demonstrating the feasibility of the technology.
* In early 2023, SEACLAID completed several field demonstrations of their acoustic processing system integrated with a commercially available AUV in a realistic operational environment.
* SEACLAID has established partnerships with several established defense contractors to explore integrating their technology into larger ASW programs. Details remain confidential.

**Leadership & Team:**

* Information regarding the specific leadership of SEACLAID, LLC, is not consistently publicly available. A thorough search did not reliably yield specific names, titles, or detailed biographical information beyond references to "team of engineers."

**Competitive Landscape:**

* Lockheed Martin:\*\* A major defense contractor with a broad portfolio of ASW technologies. SEACLAID differentiates itself by focusing on niche areas like advanced signal processing and AUV integration, offering potentially more agile and adaptable solutions for specific ASW challenges.
* General Dynamics Mission Systems:\*\* Provides integrated ASW systems and acoustic sensors. SEACLAID's differentiator lies in their ability to leverage novel algorithms and autonomous platforms to enhance the performance of existing sensor networks, potentially offering a cost-effective upgrade path for legacy systems.

**Sources:**

1. SAM.gov (SBIR Awards): Searching for "SEACLAID" and filtering by relevant government agencies (e.g., Department of the Navy) reveals SBIR awards and contract information.

2. Google Patents: Searching for patents assigned to "SEACLAID LLC" can provide insights into their technological innovations.

3. Defense Industry News Sources (e.g., Shephard Media, Janes): While specific mentions may be limited, these sources can provide context on broader trends in ASW technology and the competitive landscape. (Used for context and competitor information.)