# Dossier: APPLIED OCEAN SCIENCES, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,000,000.00

**Award Date:** 2024-10-28

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Applied Ocean Sciences, LLC (AOS) is a privately held engineering company focused on providing innovative solutions for underwater acoustic systems, particularly for defense, oceanographic research, and commercial applications. Their primary business is the design, development, and manufacture of advanced sonar systems, acoustic transducers, underwater communication devices, and associated signal processing software. AOS aims to solve the challenges of reliable and effective underwater communication and detection in complex and demanding ocean environments. Their unique value proposition lies in their ability to provide customized solutions tailored to specific customer needs, combining cutting-edge research with practical engineering expertise to deliver high-performance, robust, and cost-effective underwater acoustic technologies.

**Technology Focus:**

* AOS specializes in broadband acoustic transducers and arrays, offering both standard products and custom designs tailored to specific frequency ranges, beam patterns, and operational depths. They have demonstrated capability in manufacturing transducers operating from very low frequencies (below 1 kHz) to ultrasonic frequencies (above 1 MHz).
* AOS develops advanced signal processing algorithms and software for underwater acoustic communication, navigation, and sensing. This includes techniques for noise reduction, channel equalization, source localization, and target classification in challenging underwater environments.

**Recent Developments & Traction:**

* October 18, 2023:\*\* Applied Ocean Sciences, LLC was awarded a $1,000,000 contract from the National Science Foundation (NSF) to develop and test a prototype long-baseline (LBL) acoustic positioning system (APS) for underwater navigation and monitoring.
* June 21, 2022:\*\* Applied Ocean Sciences, LLC was awarded a $433,908 contract from the Department of the Navy, Naval Sea Systems Command to "Design and deliver a broadband acoustic source."

**Leadership & Team:**

* While exact leadership details are not readily available online, their website indicates a team of experienced engineers and scientists with backgrounds in acoustics, signal processing, oceanography, and electrical engineering. (No specific names were definitively found beyond contract awardees.)

**Competitive Landscape:**

* Teledyne Marine: A larger, more diversified company offering a broad range of underwater technology solutions. AOS differentiates itself through its specialization in custom-designed acoustic transducers and signal processing solutions, focusing on niche applications where high performance and tailored designs are critical.
* L3Harris Technologies: Another major defense contractor involved in underwater systems. AOS offers more specialized and agile solution development, specifically in acoustic components and customized systems where larger companies may be less flexible.

**Sources:**

* [https://appliedoceansciences.com/](https://appliedoceansciences.com/)
* [https://www.nsf.gov/awardsearch/showAward?AWD\_ID=2320711](https://www.nsf.gov/awardsearch/showAward?AWD\_ID=2320711)
* [https://www.defense.gov/News/Contracts/Contract/3075278/](https://www.defense.gov/News/Contracts/Contract/3075278/)