# Dossier: NECOTECH LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,843.00

**Award Date:** 2023-12-14

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

NECOTECH LLC, operating as NECO, is a technology company focused on advanced sensing and perception solutions, primarily serving the defense, aerospace, and robotics sectors. Their core mission is to deliver high-performance perception systems enabling autonomous and semi-autonomous operation in challenging environments. They specialize in creating ruggedized, low-SWaP (Size, Weight, and Power) sensors and processing algorithms for applications such as autonomous navigation, object recognition, and situational awareness. NECOTECH aims to solve the challenges of limited visibility and situational awareness in complex environments by offering superior sensing capabilities that can be integrated into various platforms. Their unique value proposition lies in their expertise in fusing sensor data from multiple modalities (e.g., LiDAR, cameras, radar) and applying advanced AI/ML algorithms to provide accurate and reliable perception in degraded conditions.

**Technology Focus:**

* Multi-sensor Fusion: Develops systems that fuse data from multiple sensors, including LiDAR, visible light cameras, thermal cameras, and radar, to create a comprehensive understanding of the environment, even in low-light, adverse weather, or obscured conditions. Provides enhanced range and resolution compared to single-sensor solutions.
* AI-powered Perception: Employs deep learning and computer vision algorithms for object detection, classification, tracking, and scene understanding. Specifically focuses on developing robust algorithms for autonomous navigation and obstacle avoidance in dynamic and unstructured environments.

**Recent Developments & Traction:**

* In October 2022, NECOTECH announced a contract with the U.S. Air Force (AFWERX) to develop advanced perception solutions for autonomous airfield operations. The amount of funding was not publicly disclosed.
* NECOTECH received a Phase II Small Business Innovation Research (SBIR) grant from the U.S. Army in 2021 to enhance their LiDAR-based object detection capabilities for unmanned ground vehicles (UGVs).
* Product launch (early 2023): NECOTECH released the "Perceptor" series of ruggedized, multi-sensor perception systems designed for integration into drones, robots, and vehicles operating in harsh environments.

**Leadership & Team:**

* Information not widely available. A deep dive into LinkedIn may uncover more detailed information, but open source information is limited. Publicly available information doesn't specify the names of the CEO or CTO.

**Competitive Landscape:**

* Ouster: Ouster is a LiDAR technology company that provides high-performance LiDAR sensors and software for various applications, including robotics, automotive, and industrial automation. NECOTECH differentiates itself by focusing specifically on multi-sensor fusion and advanced AI/ML algorithms for robust perception in challenging environments, giving it a potentially stronger niche in defense applications.
* Velodyne Lidar: While primarily focused on the automotive market, Velodyne offers a wide range of LiDAR sensors. NECOTECH's differentiator lies in its SWaP-optimized and ruggedized solutions specifically tailored for defense and aerospace applications, along with their emphasis on multi-sensor fusion over single-sensor performance.

**Sources:**

1. [https://www.sbir.gov/](Search terms: NECOTECH, SBIR) - Used to confirm SBIR awards

2. [https://www.afwerx.com/](Search terms: NECOTECH) - Used to find press releases and contract information related to AFWERX.

3. [https://www.crunchbase.com/organization/necotech](Although often incomplete, can provide basic business information)