# Dossier: OCELLA INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,890.00

**Award Date:** 2022-10-31

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

OCELLA INC, based in Sisters, Oregon, focuses on designing, developing, and manufacturing high-performance, low-SWaP (Size, Weight, and Power) imaging systems for unmanned aerial vehicles (UAVs) and other resource-constrained platforms, primarily serving the defense, aerospace, and security sectors. Their core mission revolves around providing superior situational awareness and actionable intelligence through advanced sensor technologies. They aim to solve the challenges associated with traditional imaging systems, which often suffer from bulkiness, power consumption issues, and limited processing capabilities, hindering their integration into smaller, more agile platforms. OCELLA’s unique value proposition lies in its ability to deliver extremely compact, lightweight, and energy-efficient imaging systems with advanced on-board processing, providing real-time analytics and enhanced image quality, enabling operators to gain critical insights even in challenging environments.

**Technology Focus:**

* Development of multi-spectral imaging systems, including visible, near-infrared (NIR), and thermal infrared (TIR) sensors, integrated into compact payloads for UAVs and other platforms. They prioritize high resolution with very low size, weight and power (SWaP).
* On-board processing capabilities including object detection, tracking, and identification, enabling real-time analytics and reducing the bandwidth required for data transmission. Their systems are designed for edge processing, minimizing latency and maximizing operational effectiveness.

**Recent Developments & Traction:**

* August 2023:\*\* Awarded a $1.2 million Small Business Innovation Research (SBIR) Phase II contract from the U.S. Air Force to continue developing advanced sensor technology for multi-domain operations, focusing on enhanced spectral imaging and processing capabilities.
* March 2022:\*\* Announced a partnership with a major defense contractor (unspecified) to integrate OCELLA's imaging systems into their next-generation UAV platforms. This partnership provides access to a broader market and strengthens OCELLA's position in the defense sector.
* 2021:\*\* Launched the Micro Light Imaging System (MLIS) aimed at small UAS platforms providing hi-resolution MWIR thermal imaging.

**Leadership & Team:**

* Allan Steyer (CEO):\*\* Extensive experience in the aerospace and defense industries, previously held leadership positions at FLIR Systems and other sensor technology companies.
* The team includes engineers with PhDs and masters degrees in electrical engineering, mechanical engineering, and optics.

**Competitive Landscape:**

* FLIR Systems (Teledyne FLIR):\*\* A major player in the thermal imaging market. OCELLA differentiates itself by focusing on ultra-compact, low-SWaP systems specifically designed for small UAVs, whereas FLIR's product line is broader.
* Hood Tech Corp:\*\* Specializes in EO/IR stabilized payloads. Ocella's differentiator is smaller SWaP with emphasis on edge processing.

**Sources:**

1. [https://www.ocella.com/](https://www.ocella.com/)

2. [https://www.defense.gov/News/Contracts/Contract/3492104/](https://www.defense.gov/News/Contracts/Contract/3492104/)