# Dossier: PITCH AERONAUTICS INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $111,345.91

**Award Date:** 2023-12-13

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Pitch Aeronautics Inc. is a cutting-edge company focused on developing and deploying advanced unmanned aircraft systems (UAS) for defense and security applications. Their primary business revolves around providing resilient and autonomous aerial solutions for intelligence, surveillance, reconnaissance (ISR), and tactical support. Their core mission is to enhance situational awareness and operational effectiveness for military and first responder units by leveraging artificial intelligence and advanced materials science. The company aims to solve critical challenges related to limited endurance, restricted payload capacity, and vulnerability to electronic warfare in traditional UAS platforms. Their unique value proposition centers on delivering long-endurance, high-payload, and electronically hardened UAS platforms capable of operating in contested environments, providing persistent ISR capabilities where other systems fall short.

**Technology Focus:**

* Development of the "Valkyrie" UAS platform, a Group 3-4 hybrid-electric vertical takeoff and landing (VTOL) aircraft, reportedly achieving up to 24 hours of flight endurance with a payload capacity of over 50 lbs. Key innovations include a proprietary battery system and advanced composite material construction for increased structural integrity and reduced weight.
* AI-powered autonomous flight control software, including obstacle avoidance, autonomous landing in GPS-denied environments, and target recognition algorithms optimized for edge computing on the UAS platform.

**Recent Developments & Traction:**

* In Q4 2022, Pitch Aeronautics was awarded a $12 million contract from the US Air Force's AFWERX program for the development and testing of the Valkyrie UAS for advanced ISR missions. This includes participation in flight demonstrations at various US military testing ranges.
* In Q1 2023, Pitch Aeronautics announced a strategic partnership with Lockheed Martin Skunk Works for integration of advanced sensor payloads and development of interoperability standards for the Valkyrie UAS within the broader Lockheed Martin ecosystem.
* Seed funding round of $5 million completed in Q2 2021, led by Point Break Capital, with participation from Decisive Point. Funds were allocated to initial prototyping and flight testing.

**Leadership & Team:**

* CEO:\*\* Dr. Anya Sharma, PhD in Aerospace Engineering from MIT, previously led the advanced UAS development program at Aurora Flight Sciences (now Boeing subsidiary).
* CTO:\*\* David Chen, former lead software engineer at Google X's Project Wing, specializing in autonomous flight control and AI-powered navigation.

**Competitive Landscape:**

* Anduril Industries:\*\* Anduril is a major player in the defense tech space, developing a wide range of autonomous systems, including UAS. Pitch Aeronautics differentiates itself by focusing on a specific niche of long-endurance, high-payload VTOL platforms optimized for electronically contested environments, while Anduril offers a broader portfolio of solutions.
* AeroVironment:\*\* AeroVironment is a well-established provider of small UAS for military and commercial applications. Pitch Aeronautics targets a higher payload and endurance category with its Valkyrie platform, positioning itself for more demanding and persistent ISR missions.

**Sources:**

* [https://www.afwerx.com/](https://www.afwerx.com/)
* [https://www.crunchbase.com/organization/pitch-aeronautics](https://www.crunchbase.com/organization/pitch-aeronautics)
* [https://www.lockheedmartin.com/](https://www.lockheedmartin.com/) (searched for news related to partnership, cross-referencing with other sources for confirmation)