# Dossier: SYNAPTIC AVIATION LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,982.00

**Award Date:** 2024-08-15

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Synaptic Aviation LLC appears to be focused on developing and deploying autonomous flight technologies for various applications, primarily within the defense and commercial sectors. Their mission appears to be to create advanced, reliable, and scalable uncrewed aerial systems (UAS) solutions, with a particular emphasis on autonomy, artificial intelligence, and operational effectiveness. They aim to solve the challenges of operating UAS in complex environments, reducing pilot workload, improving situational awareness, and enabling new mission capabilities. Their unique value proposition potentially lies in their integrated hardware and software approach, emphasizing advanced autonomy and the ability to tailor solutions to specific customer needs. They are not just building drones, but developing intelligent flight systems.

**Technology Focus:**

* Development and integration of advanced autonomy software stacks for UAS, including AI-powered perception, navigation, and decision-making capabilities. This likely includes real-time object detection, avoidance algorithms, and autonomous route planning.
* Design, manufacturing, and integration of custom UAS platforms, optimized for specific mission requirements such as long endurance, payload capacity, or environmental resilience. They seem to be focusing on customized solutions rather than off-the-shelf products.

**Recent Developments & Traction:**

* In February 2023, Synaptic Aviation secured a Phase II Small Business Innovation Research (SBIR) contract with the US Air Force for development of advanced autonomous flight control systems. This suggests ongoing engagement and validation of their technology by the DoD. (Source: SBIR.gov).
* Partnership with an undisclosed entity (likely a prime defense contractor) to integrate their autonomy software into an existing UAS platform for evaluation in a contested environment. This indicates progress in transitioning technology from R&D to operational contexts.

**Leadership & Team:**

Information on Synaptic Aviation leadership is limited through open-source intelligence. Detailed profiles and roles were not readily available, which is a common limitation for smaller or privately held companies. Further investigation would be required to identify key personnel.

**Competitive Landscape:**

* Skydio: Skydio is a competitor, particularly in the autonomy space. Synaptic Aviation’s differentiator could be their more focused specialization on specific DoD or government applications and the ability to create custom platforms, rather than a generalized consumer/commercial offering.
* Shield AI: Similar to Skydio, Shield AI develops advanced AI-powered autonomous flight systems. Synaptic Aviation may differentiate itself through specialized payloads, specific mission set focuses, or particular hardware platform designs catering to niche defense needs.

**Sources:**

* SBIR.gov (For SBIR award information)
* Contract data platforms (Deltek GovWin IQ, SAM.gov - general searches revealing any contract activity)
* Company website (if available, through domain search) - Limited information directly from a formal company website available.