# Dossier: Orb Aerospace Inc

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,800,000.00

**Award Date:** 2023-10-01

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Orb Aerospace Inc. is an advanced air mobility (AAM) company focused on designing, developing, and manufacturing electric vertical takeoff and landing (eVTOL) aircraft for defense and commercial applications. Their core mission is to revolutionize regional transportation by offering a safe, sustainable, and efficient alternative to traditional helicopters and ground-based vehicles. They aim to solve the problems of traffic congestion, limited accessibility in remote areas, and high operating costs associated with conventional aircraft. Their unique value proposition lies in their proprietary multi-rotor design featuring redundancy, their focus on achieving high levels of safety and reliability, and their aim to create a platform applicable to both defense (military logistics, ISR) and civilian (urban air mobility, cargo transport) markets.

**Technology Focus:**

* Orb Aerospace is developing the Integrity™ eVTOL aircraft, a multi-rotor platform designed for safety, redundancy, and performance. Initial designs indicate a projected range of up to 200 miles and a payload capacity of over 1,000 lbs.
* The company is focusing on developing proprietary flight control systems and autonomous capabilities optimized for eVTOL aircraft, including advanced sensors and algorithms for obstacle avoidance and precision landing.

**Recent Developments & Traction:**

* In November 2023, Orb Aerospace secured a $7.8M seed funding round led by Cathexis Ventures and Stellar Ventures. The funding is earmarked for accelerating the development and testing of the Integrity™ aircraft.
* Orb Aerospace announced a partnership with AFWERX in early 2023 to explore the use of its eVTOL technology for Air Force applications, including logistics and personnel transport.
* The company has been conducting flight testing of sub-scale prototypes of the Integrity™ aircraft.

**Leadership & Team:**

* Robert “Rob” Rushworth (CEO):\*\* Extensive experience in the aviation industry, formerly holding key leadership positions at Bell Textron, including roles in engineering and program management.
* John Harris (CTO):\*\* Background in aerospace engineering and robotics.
* Richard “Rich” Baker (President):\*\* Extensive operational experience.

**Competitive Landscape:**

* Joby Aviation:\*\* While primarily focused on passenger transportation, Joby is a leading eVTOL developer with significant funding and advanced technology. Orb's differentiator is their focus on smaller aircraft more suited to cargo and defense applications, and a focus on cost-effectiveness.
* Beta Technologies:\*\* Beta Technologies is developing eVTOL aircraft for both cargo and passenger transport. Orb's differentiator lies in the multi-rotor design focusing on redundancy and safety, compared to Beta's more conventional fixed-wing approach with vertical takeoff capabilities.

**Sources:**

1. [https://www.orb.aero/](https://www.orb.aero/)

2. [https://www.prnewswire.com/news-releases/orb-aerospace-closes-7-8m-seed-round-to-develop-robust-electric-aircraft-301988886.html](https://www.prnewswire.com/news-releases/orb-aerospace-closes-7-8m-seed-round-to-develop-robust-electric-aircraft-301988886.html)

3. [https://www.bizjournals.com/dallas/inno/stories/news/2023/11/22/dfw-orb-aerospace-funding.html](https://www.bizjournals.com/dallas/inno/stories/news/2023/11/22/dfw-orb-aerospace-funding.html)

4. [https://m.youtube.com/watch?v=4K-7f25LgI4](https://m.youtube.com/watch?v=4K-7f25LgI4)