# Dossier: ARCHER AVIATION INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $32,076,934.00

**Award Date:** 2023-07-21

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Archer Aviation Inc. is an electric vertical takeoff and landing (eVTOL) aircraft company focused on designing, developing, and manufacturing all-electric aircraft for urban air mobility. Their core mission is to reduce traffic congestion, noise pollution, and carbon emissions by providing a safe, sustainable, and affordable alternative transportation solution for short-distance urban and suburban travel. Archer aims to solve the problem of inefficient transportation within cities by creating a network of vertiports where their aircraft, called "Midnight", will transport passengers on short, fixed routes. Their unique value proposition lies in their focus on leveraging proven aviation technologies coupled with advanced electric propulsion systems and autonomous flight capabilities to deliver a commercially viable eVTOL aircraft that meets stringent safety standards and regulatory requirements. They are targeting a middle-mile solution, bridging the gap between ground transportation and traditional aviation.

**Technology Focus:**

* eVTOL Aircraft Design ("Midnight"):\*\* Archer's primary product is the Midnight eVTOL aircraft, designed for rapid back-to-back flights over short distances (estimated 20-mile range with a 10-minute charge time between flights). It features twelve electric motors, six tilting rotors for vertical takeoff and landing, and six fixed rotors for forward flight, optimized for payload capacity and efficiency.
* Proprietary Electric Propulsion System:\*\* Archer develops its own electric motors, batteries, and flight control systems tailored for the specific demands of eVTOL flight, prioritizing safety, reliability, and performance. They have publicly demonstrated progress in battery pack density and cooling technologies essential for eVTOL operation.

**Recent Developments & Traction:**

* FAA Certification Progress:\*\* Archer has been actively working with the FAA to achieve Type Certification for their Midnight aircraft, a key milestone for commercial operations. They have reported significant progress in meeting FAA requirements and completing necessary testing and documentation.
* Strategic Partnerships:\*\* Archer has forged partnerships with key players in the aviation industry, including United Airlines (a substantial pre-order customer) and Stellantis (providing manufacturing expertise and access to resources). The United Airlines deal includes a $1 billion order for Archer's aircraft, demonstrating strong market demand.
* Department of Defense Contracts:\*\* Archer has received contracts from the US Air Force (AFWERX program) for research and development, and potential deployment of their eVTOL technology for military applications, showcasing the dual-use potential of their aircraft.
* Funding:\*\* In August 2023, Archer closed a $215 million funding round. Investors included Stellantis, Boeing, United Airlines and ARK Invest.

**Leadership & Team:**

* Adam Goldstein (CEO):\*\* Co-founder of Archer Aviation, with prior experience in technology and business development.
* Tom Muniz (COO):\*\* Joined Archer in April 2024, bringing extensive experience in aerospace operations, manufacturing, and supply chain management.
* Geoff Bower (CTO):\*\* Co-founder of Archer Aviation, with a background in aerospace engineering and electric propulsion systems. Previously worked at Tesla.

**Competitive Landscape:**

* Joby Aviation:\*\* Joby is a primary competitor in the eVTOL space, focused on a similar vision of urban air mobility.
* Differentiator:\*\* Archer emphasizes a balanced approach combining proven aviation principles with cutting-edge electric propulsion, aiming for a commercially viable design that meets stringent safety requirements. Their partnership with Stellantis for manufacturing could provide a competitive advantage in scaling production.

**Sources:**

1. [https://archer.com/](https://archer.com/)

2. [https://ir.archer.com/](https://ir.archer.com/)

3. [https://www.defensedaily.com/archer-aviation-announces-300m-contract-with-us-air-force/](https://www.defensedaily.com/archer-aviation-announces-300m-contract-with-us-air-force/)

4. [https://www.reuters.com/business/aerospace-defense/archer-aviation-close-215-mln-funding-2023-08-08/](https://www.reuters.com/business/aerospace-defense/archer-aviation-close-215-mln-funding-2023-08-08/)