

# Archer Aviation (ACHR) Stock Research Report

Written by Xiyuan Wei, July 18 2024

## **Company & Product Summary:**

Archer Aviation is a company specializing in Electric Vertical Take-Off and Landing (eVTOL) aircrafts, founded by Brett Adcock and Adam Goldstein. The aircraft is designed to allow airline operators to transport people in and around cities in air taxi service and are claimed to have a range of up to 100 miles (160km) at speeds of up to 150 miles per hour (240 km/h). The advantages of the aircrafts are its cheap manufacturing cost in the future, its environmentally friendly feature, and its priority to safety.

## **Market Analysis:**

Firstly, the market prospect for Archer Aviation and its representing industry is positive. The Global Drone Market is expected to reach 260 billion by 2030; the eVTOL aircrafts sales are expected to be expanding at CAGR of 21.5%, reaching 3 billion by 2034. Overall, it is an undeniable fact that Archer Aviation is in a field of large potential growth opportunities. Thus, in this research paper, I would be more focusing on Archer Aviation and its competitors, ranging from its Legal authorizations from the Federal Aviation Administration (FAA), path to commercialization, senior management team, cash flow/debt ratio, Legal authorizations, to its potentials to mass production.

## **Certification & Testing:**

Comparing to its competitor like Joby Aviation (JOBY), Archer Aviation is still pursuing Joby's path and potentially outrun Joby Aviation in terms of the legalization process. But here are some news regarding key dates for certification & testing:

June 5, 2024:	ACHR receives Part 135 certification (Air Carrier & Operator Certification) from the FAA.
May 23, 2024	FAA released the final airworthiness criteria for ACHR to receive its type certificate.
February 8, 2024	ACHR receives Part 145 certification (Repair Station Operators Certification) from the FAA.

Through my research, it is understood that the final step for ACHR to begin its commercialization is by obtaining the Type Certificate for its aircrafts, Midnight. Archer Aviation did not provide a specific timeline for Type Certificate. On the other hand, Joby Aviation, Archer Aviation's competitor, received the final guideline of type certification for Joby's Air Taxi back in March 2024, putting itself at an advantageous position comparing to Archer Aviation.

Another note on Billy Nolan, Chief Security Officer of Archer Aviation, was once the acting administrator of FAA. Thus, having him onboard as the Chief Security Officer raises the investors confidence in passing the certification and testing stage.

## **Senior Management Team**

Adam Goldstein - Founder, CEO

Since the start, Adam Goldstein has served as the President of ACHR, and after the company goes public, Adam has been elected as the CEO of Archer Aviation, while he remains a member of the board of directors. Adam started off being an investment banker at New York, giving him particular advantage in building business model and connection to the financial world. After watching his interview, his ambition and confidence could be sensed. The only apparent downside is that Adam doesn't have a technical background, which would certainly be against the best interest of the company. However, his financial background and his knowledge from Investment Banking experience could definitely put him at a good position of delivering the business model and commercializing the product.

Brett Adcock - co-Founder, former-co-CEO

Brett once started the company together with Adam, and he has a strong tech interest which would constitute a tech background. He worked closely with Adam since 2013, when both people created Vetterly together, an online hiring marketplace. He graduated with a Bachelor's degree in Finance, from the same university Adam Goldstein came from, University of Florida. However, he stepped down as the Co-CEO in April 2022, and sold all his shares in August 2023.

### *Stories behind the two CEOs:*

When Brett Adcock steps down as the co-CEO of Archer Aviation, he said: "I left Archer in April of last year. Still a major shareholder, but I felt like there was a misalignment between me and the board, given we were in the public markets. The things I wanted to do were just different from what the group wanted to do, and it's a little bit of a pain going public. And I really needed to get focused on this new AI/robotics revolution."

My understanding towards this part is that, there is a misalignment with the board, specifically between his vision and the board's expectations, particularly after the company went public. He notes that being a public company comes with its own set of challenges, implying that these challenges contributed to his decision to step down. Public companies face significant scrutiny and regulatory requirements, which can be burdensome.

### **Mass Production Updates:**

One of Archer Aviation's long term plan of mass production is to be achieved by construction of the high-volume manufacturing facility in Covington. This factory is supposed to support production of up to 650 aircraft annually, which would make it one of the largest manufacturing facilities by volume in the aircraft industry. The facility will be capable of being expanded by another 550,000 feet, making it possible to support 2300 aircrafts annually. The construction is planned to be done during the first half of 2024, and expected to be put in use in the second half of 2024.

### Fundamental Analysis:

*Due to the fact that this is a not-yet commercialized startup, various fundamental indicators are not applicable. What I would focus on is the current ratio and debt equity ratio, insider ownership.*

As of March 31st, 2024,	Archer Aviation	Joby Aviation
Total Current Asset	422 million	951.69 million
debt equity raio	0.09	0.03
current ratio	6.01	24.89
Insider Ownership	40.57%	46.61%
Net Loss	-116.5 million	-94.587 million
Short Float	28.55%	19.04%

Through the analysis of data, the total current asset is 422 million dollars; Debt equity ratio and Current ratio both indicate that the company is in really healthy financial situation. And the amount of cash left is more than able to support three more quarters (estimated from this quarter's net loss), disregarding the future investment into the company. The short float 28.55%, which compared to 19.04% for Joby, is pretty high for Archer. In the following report, the cash flow health is still one of the most important things to check.

***Strategic partnerships:***

Stellantis - Archer Aviation has key partnership with Stellantis, making the latter Archer's exclusive contract manufacturer for mass production of its eVTOL aircraft. Stellantis provided up to 150 million in equity capital to support Archer's growth, buying 8.3 million shares in March 18, 2024, and an investment of additional 55 million dollars in July 2nd, 2024.

United Airline - United Airline has offered a conditional contract of 1 billion dollars for Archer Aviation's aircrafts, and 500 million in options in conjunction with the startup's merger with a special purpose acquisition company in 2021.

UAE - Archer Aviation has signed a framework agreement with ADIO at the DRIFTx mobility event , which is a multi-Hundred Million Dollar agreement to build the future of UAE Air Travel.

**Conclusion:**

Overall, Archer Aviation has demonstrated strong potential of growth, but there remains many areas of uncertainty, though none of them actually pose a challenge to Archer's future prosperity, worth paying attention to in the future earnings report. Joby Aviation, being one of the strongest competitors Archer has, is still ahead of Archer in terms of overall progress in eVTOL.