# Dossier: Air Company Holdings, Inc.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,942.00

**Award Date:** 2024-02-12

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Air Company Holdings, Inc. is a carbon technology company focused on transforming carbon dioxide into valuable products, primarily sustainable aviation fuel (SAF) and consumer goods like ethanol-based spirits and fragrances. Their core mission is to reduce atmospheric carbon levels by capturing CO2 and utilizing it to create fuels and other products, addressing the environmental challenges associated with traditional fossil fuels and carbon emissions. Their unique value proposition lies in their proprietary carbon conversion technology, which offers a more sustainable and environmentally friendly alternative to conventional production methods for SAF and other carbon-intensive products. They aim to decarbonize hard-to-abate sectors like aviation and the alcohol industry, creating a closed-loop carbon economy.

**Technology Focus:**

* AirMade™ Technology:\*\* A proprietary process that mimics photosynthesis, utilizing renewable energy (electricity), air-captured CO2, and water to produce ethanol. This ethanol is then upgraded into sustainable aviation fuel (SAF).
* Ethanol Production:\*\* Manufacturing of high-quality ethanol, the foundation for their spirit and fragrance products, directly from CO2. Their process avoids traditional agricultural inputs associated with ethanol production.

**Recent Developments & Traction:**

* Sustainable Aviation Fuel (SAF) Production:\*\* In 2023, Air Company demonstrated the capability to produce significant quantities of SAF using their AirMade™ technology. They’ve secured partnerships to scale up SAF production and deployment.
* Partnerships:\*\* Air Company has partnered with JetBlue and Virgin Atlantic to provide SAF for test flights and future commercial operations. They've also worked with the U.S. Air Force on projects exploring SAF potential.
* Series A Funding (2022):\*\* Air Company raised $30 million in a Series A funding round led by Carbon Direct Capital Management to accelerate the commercialization of its carbon conversion technology and expand production capacity.

**Leadership & Team:**

* Gregory Constantine (CEO & Co-Founder):\*\* Experienced in brand development and marketing, previously working in the spirits industry.
* Stafford Sheehan (CTO & Co-Founder):\*\* Holds a Ph.D. in Chemical Engineering and has expertise in CO2 conversion technologies and reactor design.

**Competitive Landscape:**

* LanzaTech:\*\* A direct competitor in the carbon capture and utilization space, focusing on converting industrial emissions into fuels and chemicals. Air Company differentiates itself through its focus on air-captured CO2 and its product diversification beyond fuels into consumer goods.
* Twelve Benefit Corporation (formerly Opus 12):\*\* Another competitor developing electrochemical reactors to transform CO2 into various industrial products. Air Company's advantage may lie in their established SAF production partnerships and market presence in the consumer sector.

**Sources:**

1. [https://www.aircompany.com/](https://www.aircompany.com/)

2. [https://www.carbon-direct.com/portfolio/air-company/](https://www.carbon-direct.com/portfolio/air-company/)

3. [https://www.crunchbase.com/organization/air-co](https://www.crunchbase.com/organization/air-co)

4. [https://www.aviationtoday.com/2022/09/22/air-company-seeks-disrupt-aviation-sustainable-fuel/](https://www.aviationtoday.com/2022/09/22/air-company-seeks-disrupt-aviation-sustainable-fuel/)