# Dossier: ELROY AIR INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $235,268.17

**Award Date:** 2024-02-15

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Elroy Air, Inc. is a California-based company focused on developing autonomous vertical take-off and landing (VTOL) cargo aircraft for middle-mile logistics. Their core mission is to revolutionize the movement of goods, particularly in areas underserved by traditional transportation infrastructure, by creating a more efficient, accessible, and sustainable air cargo network. The company aims to solve problems related to limited road infrastructure, high operational costs of helicopters and traditional fixed-wing aircraft, and supply chain bottlenecks, particularly in time-sensitive situations and remote locations. Their unique value proposition lies in their hybrid-electric VTOL aircraft, Chaparral, which is designed for autonomous operations, high payload capacity, and long-range capabilities, offering a cost-effective and environmentally conscious alternative to existing air cargo solutions.

**Technology Focus:**

* Chaparral: A hybrid-electric VTOL cargo aircraft designed to carry up to 500 lbs of cargo over a range of up to 300 miles. It uses a combination of distributed electric propulsion and a turbine engine for efficient cruise flight.
* Autonomous Flight System: Elroy Air is developing a proprietary autonomous flight system incorporating advanced sensors, AI-powered navigation, and obstacle avoidance capabilities to enable safe and reliable uncrewed operations in complex environments.

**Recent Developments & Traction:**

* May 2024:\*\* Announced a partnership with AI drone specialist Iris Automation to integrate their Casia X onboard detect-and-avoid system onto Chaparral aircraft.
* July 2022:\*\* Secured a strategic partnership with Bristow Group, a leading global provider of vertical flight solutions, for pre-order commitments for up to 100 Chaparral aircraft and collaboration on aircraft design and operational readiness.
* August 2022:\*\* Announced a $40 million Series B funding round led by Peter Thiel's Founders Fund, with participation from existing investors including Lockheed Martin Ventures and strategic investors such as Prosperity7 Ventures, the venture capital arm of Saudi Aramco.

**Leadership & Team:**

* Dave Merrill (CEO & Co-Founder):\*\* Former CEO and Co-founder of AutoFuel Systems, developing efficient engine control systems. Extensive experience in mechanical and aerospace engineering.
* Clint Cope (Co-Founder):\*\* Background in robotics and automation; previously at Zap Robotics.

**Competitive Landscape:**

* Volocopter:\*\* While primarily focused on passenger drones (eVTOLs), Volocopter also explores cargo applications and competes in the autonomous VTOL space. Elroy Air differentiates itself through its hybrid-electric propulsion system and focus on longer range, larger payload cargo applications.
* Natilus:\*\* Natilus develops autonomous cargo aircraft, but their focus is on significantly larger, fixed-wing designs for intercontinental freight, putting Elroy Air in a distinct middle-mile niche.

**Sources:**

1. https://elroyair.com/

2. https://www.foundry.com/companies/elroy-air/

3. https://www.prnewswire.com/news-releases/elroy-air-announces-iris-automation-as-detect-and-avoid-system-provider-for-chaparral-aircraft-302157503.html

4. https://www.lockheedmartin.com/en-us/capabilities/ventures/our-portfolio/elroy-air.html

5. https://techcrunch.com/2022/08/02/elroy-air-closes-40m-series-b-for-autonomous-cargo-aircraft/