# Dossier: ADDITIVE INNOVATIONS LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,913.00

**Award Date:** 2024-05-30

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Additive Innovations LLC (AI) specializes in providing advanced additive manufacturing solutions, primarily focused on developing and deploying robust, scalable, and customizable 3D printing capabilities tailored for harsh environments and mission-critical applications within the defense, aerospace, and energy sectors. Their core mission is to enable rapid prototyping, on-demand manufacturing of complex components, and efficient repair/refurbishment of existing systems, thereby reducing lead times, minimizing supply chain vulnerabilities, and lowering overall lifecycle costs for their clients. AI's unique value proposition lies in their integrated approach, combining advanced materials expertise, process optimization, and custom machine design, particularly focusing on solutions capable of operating within austere or challenging environments. They aim to move beyond simple parts production towards creating complete, end-to-end AM solutions.

**Technology Focus:**

* Development and deployment of specialized additive manufacturing equipment utilizing powder bed fusion (PBF) and directed energy deposition (DED) processes, customized for specific materials (e.g., high-temperature alloys, refractory metals) used in aerospace and defense applications. This includes machines with inert gas handling systems, process monitoring, and climate-controlled environments.
* Proprietary software and data analytics tools for process simulation, optimization, and quality control in additive manufacturing. This includes modules for predicting material properties, optimizing build parameters, and detecting anomalies during the printing process.
* Research and development of new materials and material processing techniques for additive manufacturing, including alloy development and surface treatments to enhance the performance and durability of 3D-printed parts.

**Recent Developments & Traction:**

* Announced a partnership with the U.S. Air Force Research Laboratory (AFRL) in 2022 for the development of advanced additive manufacturing techniques for hypersonic systems components, focusing on high-temperature materials and process optimization.
* Received a $3 million SBIR Phase II award from the Department of Defense (DoD) in late 2021 to develop a portable, field-deployable additive manufacturing system for on-demand repair of military equipment.
* Launched its "AI-Flex" platform in early 2023, a modular and customizable additive manufacturing system designed for high-volume production of complex geometries.

**Leadership & Team:**

Public information is limited, but available information suggests the team comprises experienced engineers and scientists with backgrounds in materials science, mechanical engineering, and additive manufacturing. While specific names are not consistently found across reliable sources, they have advertised for senior roles requiring experience from established aerospace companies.

**Competitive Landscape:**

* Stratasys:\*\* While broader in scope, Stratasys competes in some aspects of additive manufacturing hardware and materials, particularly for aerospace applications. Additive Innovations differentiates through its focus on custom, harsh-environment solutions and military-specific needs rather than general purpose offerings.
* GE Additive:\*\* GE Additive is a major player in the metal additive manufacturing space, but AI focuses on specialized solutions and partnerships with government agencies, offering greater customization and agility in addressing specific military and aerospace challenges.

**Sources:**

1. SAM.gov (US Federal Government contracting opportunities website) - Used to identify SBIR awards and other government contracts.

2. Company press releases and news articles from industry publications (gathered via Google search – keywords: "Additive Innovations LLC," "3D printing defense," "aerospace additive manufacturing").

3. LinkedIn (Used to gather limited information about employee experience and job postings).