# Dossier: A.M. Toolbox, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,935.00

**Award Date:** 2024-05-13

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

A.M. Toolbox, LLC is a software company focused on providing solutions for additive manufacturing (AM) workflow management and analysis, specifically tailored for the aerospace and defense industries. Their core mission is to streamline and secure the entire AM lifecycle, from design and simulation to production and post-processing, ensuring quality control, traceability, and regulatory compliance. A.M. Toolbox aims to address the challenges of fragmented AM workflows, data silos, and a lack of standardization that hinder the widespread adoption of 3D printing in critical applications. Their unique value proposition lies in their ability to offer a centralized, secure, and auditable platform for managing AM data and processes, enabling organizations to confidently produce high-quality, mission-critical parts.

**Technology Focus:**

* Development and deployment of AM-Flow, a software platform that integrates data management, process control, and quality assurance tools for additive manufacturing. The platform supports various AM technologies and materials, including metals, polymers, and composites.
* Provides advanced simulation and analysis capabilities within AM-Flow, including finite element analysis (FEA), computational fluid dynamics (CFD), and build process simulation. These tools allow users to optimize designs, predict part performance, and minimize defects.

**Recent Developments & Traction:**

* In November 2022, A.M. Toolbox was awarded a Phase II Small Business Innovation Research (SBIR) grant from the Air Force Research Laboratory (AFRL) to further develop its AM-Flow platform for secure data exchange and process control in distributed manufacturing environments.
* The company announced enhancements to its AM-Flow software, including improved data visualization, enhanced security features, and integration with additional AM hardware and software providers, in 2023.
* A.M. Toolbox is actively pursuing partnerships with leading aerospace and defense companies to pilot and deploy its AM-Flow platform for specific applications, although details are often proprietary.

**Leadership & Team:**

* Dr. Ashley Baber – CEO. Background in mechanical engineering and materials science, with a focus on additive manufacturing process development and optimization. Extensive research experience.

**Competitive Landscape:**

* Link3D: Link3D offers a similar end-to-end AM workflow management platform. A.M. Toolbox differentiates itself with its greater focus on security and compliance, particularly for regulated industries like aerospace and defense, and its emphasis on advanced simulation capabilities within the platform.
* Identify3D: Focuses on IP protection and data security in additive manufacturing. A.M. Toolbox offers broader workflow management capabilities in addition to data security features.

**Sources:**

1. [https://www.am-toolbox.com/](https://www.am-toolbox.com/)

2. [https://www.afsbirsttr.com/](https://www.afsbirsttr.com/) (Search for A.M. Toolbox)

3. [https://www.crunchbase.com/organization/a-m-toolbox](https://www.crunchbase.com/organization/a-m-toolbox) (Paywall likely limits access to funding details)