# Dossier: METIS DESIGN CORPORATION

## SBIR Award Details

**Award Title:** N/A

**Amount:** $75,000.00

**Award Date:** 2024-05-17

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

METIS Design Corporation is a US-based engineering firm specializing in complex systems design, analysis, and optimization, primarily serving the aerospace, defense, and energy sectors. Their core mission revolves around providing innovative solutions to challenging engineering problems, particularly those involving dynamic systems, control systems, and high-performance components. They aim to reduce development time and cost, improve system performance, and enhance reliability through advanced simulation, modeling, and testing techniques. Their unique value proposition lies in their ability to combine deep theoretical knowledge with practical engineering experience to deliver customized, data-driven solutions tailored to the specific needs of their clients, often involving bespoke algorithms and simulation platforms.

**Technology Focus:**

* Development and application of advanced simulation and modeling tools for dynamic systems, including Computational Fluid Dynamics (CFD), Finite Element Analysis (FEA), and Multi-Body Dynamics (MBD) simulations. This includes custom tool development when off-the-shelf solutions aren't sufficient.
* Expertise in control systems design and analysis, with a focus on developing robust and efficient control algorithms for aerospace and defense applications, such as missile guidance, UAV control, and aircraft flight control systems. This often involves developing control systems that minimize errors and adapt to changing environments.

**Recent Developments & Traction:**

* May 2022:\*\* Awarded a contract by the Air Force Research Laboratory (AFRL) to develop advanced control algorithms for hypersonic vehicle flight control. This demonstrates continued government trust and expertise in high-speed flight control.
* October 2021:\*\* Partnered with a major aerospace prime contractor to provide simulation and analysis support for a next-generation aircraft development program. This signals traction within the larger aerospace defense industry.
* September 2020:\*\* Published a whitepaper detailing their approach to Model-Based Systems Engineering (MBSE) for complex system design, demonstrating thought leadership and technical expertise.

**Leadership & Team:**

* Todd Letcher (President):\*\* Brings extensive experience in engineering consulting and project management, with a focus on aerospace and defense applications. His background is critical in securing and managing government contracts.
* While specific C-level titles beyond the President are not readily publicly available, the firm highlights their deep bench of PhD-level engineers and experienced consultants on their website, indicating a technically strong team.

**Competitive Landscape:**

* ANSYS:\*\* A leading provider of general-purpose simulation software. METIS differentiates itself through its focus on custom solutions and deep expertise in specific aerospace and defense applications, providing tailored engineering consulting services.
* Altair Engineering:\*\* Another provider of simulation software. Metis Design offers specialized services focused specifically on control systems and dynamic systems optimizations that sets them apart in the defense and aerospace sectors.

**Sources:**

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

2. [https://www.metisdesign.com/news/](https://www.metisdesign.com/news/)

3. [https://www.defenseadvancement.com/portfolio/metis-design-corporation/](https://www.defenseadvancement.com/portfolio/metis-design-corporation/)