# Dossier: ATA ENGINEERING, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $149,955.85

**Award Date:** 2024-08-05

**Branch:** MDA

## AI-Generated Intelligence Summary

**Company Overview:**

ATA Engineering, Inc. is a leading provider of engineering services focused on structural dynamics, stress analysis, test engineering, and integrated solutions for the aerospace, defense, and automotive industries. Their core mission revolves around optimizing product performance, reducing development time, and minimizing risk through advanced simulation, testing, and design optimization techniques. ATA Engineering aims to solve complex engineering challenges related to vibration, noise, fatigue, and structural integrity, enabling clients to develop more reliable, efficient, and robust products. Their unique value proposition lies in their ability to combine sophisticated analytical tools (such as finite element analysis, modal analysis, and computational fluid dynamics) with hands-on testing expertise to provide comprehensive solutions from concept to final product verification. They offer both engineering consulting services and custom software tool development to meet specific client needs, making them a valuable partner for companies seeking to innovate and improve their products.

**Technology Focus:**

* Advanced Simulation & Analysis:\*\* Extensive use of finite element analysis (FEA), computational fluid dynamics (CFD), and other numerical methods to predict product performance under various operating conditions. Specialized expertise in areas such as vibro-acoustics, structural acoustics, and system dynamics.
* Test & Measurement Services:\*\* Comprehensive testing capabilities including modal testing, vibration testing, environmental testing, and data acquisition. They operate state-of-the-art testing facilities and develop custom test solutions for unique applications.

**Recent Developments & Traction:**

* DARPA Projects:\*\* ATA Engineering has been frequently awarded contracts with the Defense Advanced Research Projects Agency (DARPA) related to advancements in various areas like active flow control and structural health monitoring. These grants signal trust and investment in ATA's capabilities.
* Software Development:\*\* Continued enhancements and updates to their proprietary software tools, including integration with industry-standard CAE software platforms. Focus on developing custom solutions for specific client requirements.
* Continued Growth & Expansion:\*\* Sustained growth driven by increased demand for engineering services in the aerospace and defense sectors. Focused on expanding capabilities and expertise in emerging areas such as additive manufacturing and hypersonic systems.

**Leadership & Team:**

* Michael Ruane (President):\*\* Assumed the role in 2018, after being promoted from Chief Technical Officer. Extensive history in the company, formerly leading test services and simulation activities.
* Key Engineers:\*\* The company features a large roster of PhD-level and other highly-skilled engineers with significant expertise in areas like vibrations, structural dynamics, and test engineering. The expertise of the team is presented as their greatest strength.

**Competitive Landscape:**

* Wyle (KBR):\*\* Wyle, now part of KBR, offers similar testing and engineering services, including vibration and environmental testing. ATA differentiates itself through its specialized focus on integrated analysis and testing solutions for complex engineering problems.
* ESI Group:\*\* ESI Group is an international company with a broad portfolio of simulation software and services. ATA's competitive advantage lies in its deep application-specific expertise, strong client relationships, and ability to provide customized solutions tailored to the unique needs of the aerospace and defense industries.

**Sources:**

* [https://www.ata-e.com/](https://www.ata-e.com/)
* [https://www.mbtmag.com/content/structural-testing-and-analysis-company-ata-engineering-inc-acquires-vibro-acoustics-testing](https://www.mbtmag.com/content/structural-testing-and-analysis-company-ata-engineering-inc-acquires-vibro-acoustics-testing)
* [https://www.rocket.com/company/ata-engineering-inc](https://www.rocket.com/company/ata-engineering-inc)