# Dossier: PROPORTIONAL TECHNOLOGIES, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,695,732.24

**Award Date:** 2023-01-09

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

Proportional Technologies, Inc. (PTI) is a US-based engineering and manufacturing company specializing in the design, development, and production of advanced electromagnetic actuators and control systems for aerospace, defense, and industrial applications. Their core mission centers on delivering high-performance, reliable, and customizable actuator solutions that address critical challenges in precision control, safety, and efficiency across various industries. PTI aims to solve the limitations of traditional hydraulic and pneumatic systems by offering lighter, more compact, and energy-efficient alternatives with superior accuracy and responsiveness. Their unique value proposition lies in their ability to provide tailored electromagnetic actuator solutions optimized for specific customer requirements and demanding operating environments.

**Technology Focus:**

* Electromagnetic Actuators: Designs and manufactures custom electromagnetic actuators for precise linear and rotary motion control. These actuators utilize advanced electromagnetic principles to achieve high force-to-weight ratios, fast response times, and closed-loop control capabilities. Specific performance metrics (e.g., force, stroke, bandwidth) depend on the custom design.
* Control Systems: Develops integrated control electronics and software algorithms for precise and reliable operation of their electromagnetic actuators. This includes embedded controllers, sensor feedback integration, and custom control logic tailored to specific application requirements.

**Recent Developments & Traction:**

* October 26, 2022:\*\* Proportional Technologies, Inc. was awarded a Phase I SBIR from the U.S. Department of the Navy to develop a Lightweight Ejector Release Unit (ERU) Actuator for Improved Carrier Suitability.
* February 10, 2021:\*\* Proportional Technologies, Inc. was awarded a Phase I SBIR from the U.S. Department of the Air Force to develop a miniature high-speed high-force linear actuator.

**Leadership & Team:**

* Information not available through web search.

**Competitive Landscape:**

Primary competitors include Moog Inc. and Parker Hannifin. PTI differentiates itself through its specialization in highly customized electromagnetic actuator solutions and its focus on providing responsive engineering support for demanding applications. This allows them to address niche markets requiring specific performance characteristics that may not be readily available from larger, more general-purpose actuator manufacturers.

**Sources:**

* [https://www.proportionaltech.com/](https://www.proportionaltech.com/)
* [https://www.sbir.gov/sbirsearch/detail/2113876](https://www.sbir.gov/sbirsearch/detail/2113876)
* [https://www.sbir.gov/sbirsearch/detail/2053085](https://www.sbir.gov/sbirsearch/detail/2053085)