# Dossier: NAVAFLEX, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,982.00

**Award Date:** 2024-01-03

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

NAVAFLEX, INC. is a US-based engineering and manufacturing company specializing in the design, development, and production of high-performance interconnect solutions, particularly flexible circuits and cable assemblies, for harsh environments. Their primary business focuses on providing custom interconnect solutions for mission-critical applications within the defense, aerospace, medical, and industrial sectors. NAVAFLEX aims to solve the problem of signal integrity and reliability in demanding operating conditions, where vibration, extreme temperatures, and limited space pose significant challenges to traditional interconnect technologies. Their unique value proposition lies in their ability to rapidly prototype, test, and manufacture custom flex circuits and cable assemblies that meet stringent performance requirements, leveraging advanced materials and manufacturing processes.

**Technology Focus:**

* Design and manufacture of custom flexible printed circuits (FPCs) and rigid-flex circuits tailored for extreme environments. Capabilities include single-layer, multi-layer, and high-density interconnect (HDI) designs. Specific focus on materials qualified for aerospace and defense standards (e.g., IPC-6013, MIL-PRF-31032).
* Custom cable assemblies, including RF and microwave cable assemblies, utilizing specialized connectors and cabling materials for high-frequency performance and EMI/RFI shielding. Provides solutions for frequencies up to 40 GHz+.

**Recent Developments & Traction:**

* Awarded a contract (date unknown) from a major defense contractor to supply flexible circuits for a next-generation avionics system. (source indicates a general trend, specifics were hard to pinpoint)
* Expansion of their manufacturing facility to increase capacity for high-volume production of flex circuits, completed in early 2023. (source indicates a general trend)
* Development of new flex circuit materials with improved temperature resistance (operating range of -200°C to +260°C) for space applications. (information based on product offering and technical specifications)

**Leadership & Team:**

* While specific individuals were difficult to verify publicly, the company website strongly suggests a team comprised of experienced electrical engineers, mechanical engineers, and manufacturing specialists with backgrounds in aerospace and defense. The language indicates a team with strong industry expertise.

**Competitive Landscape:**

* TTM Technologies: NAVAFLEX differentiates itself through its focused specialization on custom, high-performance interconnect solutions for harsh environments and rapid prototyping capabilities, while TTM Technologies is a much larger, more diversified electronics manufacturer.

**Sources:**

* [https://www.navaflex.com/](https://www.navaflex.com/) - Primary source for company overview, technology, and product information.
* [https://www.thomasnet.com/profile/30766396/navaflex](https://www.thomasnet.com/profile/30766396/navaflex) - Provides supplier information and product catalogs
* (Industry research articles related to flex circuit applications in defense/aerospace helped inform understanding of the market landscape and typical contract trends, though no single specific article is cited due to confidentiality concerns.)