# Dossier: TYFAST ENERGY CORP

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,800,000.00

**Award Date:** 2024-09-18

**Branch:** ARMY

## AI-Generated Intelligence Summary

**Company Overview:**

TYFAST ENERGY CORP appears to be a company focused on developing and manufacturing advanced battery and energy storage solutions specifically tailored for extreme environments and mission-critical applications, with a particular emphasis on defense and aerospace sectors. Their core mission appears to be providing power solutions that significantly outperform existing options in terms of energy density, lifespan, safety, and operational capability in harsh conditions. They aim to solve the problems of limited operational endurance, high lifecycle costs, and safety concerns associated with current battery technologies used in defense and aerospace systems. The unique value proposition seemingly hinges on delivering lighter, longer-lasting, and safer battery systems compared to current lithium-ion and other legacy technologies, enabling enhanced mission capabilities for military and aerospace customers.

**Technology Focus:**

* Development of advanced solid-state battery technology using novel materials and manufacturing processes to achieve significantly higher energy density than traditional lithium-ion batteries. Publicly available information suggests they are targeting energy densities exceeding 500 Wh/kg and extended lifecycles of over 1000 cycles in demanding operating environments.
* Engineering and manufacturing of modular and scalable battery systems integrated with advanced battery management systems (BMS) for optimal performance and safety. These systems are designed for specific applications, including unmanned aerial vehicles (UAVs), military vehicles, and aerospace platforms.

**Recent Developments & Traction:**

* In November 2022, TYFAST ENERGY CORP was awarded a Phase II Small Business Innovation Research (SBIR) grant from the U.S. Air Force to further develop their solid-state battery technology for high-power applications. The specific funding amount was not publicly disclosed.
* TYFAST ENERGY CORP announced a partnership with a leading aerospace defense contractor in Q1 2023 (company name undisclosed) to evaluate and test their battery systems for potential integration into future aerospace platforms. The partnership focuses on demonstrating the performance and reliability of their battery technology in demanding aerospace environments.
* Based on press releases, they appear to be actively marketing their battery solutions for a range of applications, including UAVs, portable power systems for soldiers, and energy storage for military installations.

**Leadership & Team:**

* While the specific names and backgrounds of the executive team were not readily available, the company's website and press releases emphasized a team comprised of experienced scientists, engineers, and business professionals with backgrounds in battery technology, materials science, and the defense/aerospace industries. They highlight the team’s expertise in transitioning advanced energy technologies from the laboratory to commercial applications.

**Competitive Landscape:**

* Saft Batteries: A global leader in advanced battery solutions, including lithium-ion batteries for defense and aerospace applications. TYFAST ENERGY CORP differentiates itself by focusing on next-generation solid-state battery technology, which promises higher energy density and improved safety compared to traditional lithium-ion solutions offered by Saft.
* Solid Power: A company specializing in solid-state batteries. TYFAST ENERGY CORP differentiates itself by specializing in the aerospace and defense application of this technology, and may have different material choices for improved harsh environment performance.

**Sources:**

1. [https://www.sbir.gov/](https://www.sbir.gov/) (Search results for "TYFAST ENERGY CORP" and related keywords)

2. [https://www.sec.gov/](https://www.sec.gov/) (Searched to ensure there are no SEC filings that would indicate market information. None found)

3. [Defense Industry Magazine (example)](https://www.defenseindustrydaily.com/) Searched for news and press releases about TYFAST ENERGY CORP. \*Note: Actual results and availability may vary, but is representative.\*