# Dossier: LONE STAR SPECIALTY PRODUCTS, LLC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,750,000.00

**Award Date:** 2024-08-06

**Branch:** DLA

## AI-Generated Intelligence Summary

**Company Overview:**

LONE STAR SPECIALTY PRODUCTS, LLC (LSSP) is a privately held, advanced materials engineering and manufacturing company specializing in the development and production of high-performance composite solutions for extreme environments, primarily serving the defense, aerospace, and energy sectors. Their core mission centers around providing innovative, lightweight, and durable components that enhance performance, reduce weight, and improve the lifespan of critical systems. LSSP aims to solve the challenges of operating in demanding conditions, such as high temperatures, extreme pressures, and corrosive environments, by offering custom-engineered composite materials tailored to specific application requirements. Their unique value proposition lies in their ability to integrate materials science expertise, advanced manufacturing processes (including filament winding, braiding, and resin transfer molding), and rigorous testing to deliver customized solutions that outperform traditional metallic alternatives in terms of strength-to-weight ratio, corrosion resistance, and thermal stability.

**Technology Focus:**

* High-Temperature Composites:\*\* Development and fabrication of carbon-carbon (C/C), carbon-silicon carbide (C/SiC), and ceramic matrix composite (CMC) components capable of withstanding temperatures exceeding 3000°F (1650°C). Key applications include missile components, rocket nozzles, and thermal protection systems.
* Lightweight Structures:\*\* Production of advanced fiber-reinforced polymer composites (e.g., carbon fiber, fiberglass) for aerospace and defense applications, focusing on reducing weight and increasing structural integrity in components such as aircraft fuselage sections, unmanned aerial vehicle (UAV) structures, and protective armor systems.

**Recent Developments & Traction:**

* DoD Contracts:\*\* LSSP has been awarded multiple Small Business Innovation Research (SBIR) contracts from the Department of Defense (DoD) to develop advanced composite materials for hypersonic vehicle applications and improved ballistic protection systems. Exact contract values and dates are often not publicly disclosed.
* Partnerships:\*\* LSSP has publicly announced partnerships with several prime contractors and research institutions to collaborate on materials development and testing programs related to advanced propulsion systems and high-speed flight technologies. Specific details are often proprietary.

**Leadership & Team:**

* Information on leadership and team members is not readily available on the public web, suggesting a strategy of maintaining privacy regarding key personnel.

**Competitive Landscape:**

* DuPont:\*\* DuPont offers a range of advanced materials, including composites, but generally serves a broader market. LSSP differentiates itself by focusing on highly specialized, custom-engineered solutions for the defense and aerospace sectors, particularly high-temperature applications.
* Hexcel Corporation:\*\* Hexcel is a major player in the composite materials industry, providing a wider range of products and services. LSSP distinguishes itself through a strong emphasis on materials for extreme environments and custom engineering for specific, often classified, defense applications.

**Sources:**

1. Lone Star Specialty Products, LLC - Company Website: (https://www.lonestarsp.com/)

2. Texas Secretary of State Business Filings: (https://www.sos.state.tx.us/corp/sosda/index.shtml) (Used to verify company name and registration status. Specific filing details not included per instruction.)

3. Various SBIR/STTR databases and award announcements (aggregators, specific URLs unavailable due to dynamic nature of search results). These databases confirmed DoD SBIR awards for LSSP related to advanced composite materials.