# Dossier: STRUCTURAL COMPOSITES INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,493.00

**Award Date:** 2024-08-30

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Structural Composites Inc. (SCI) is a leading engineering, design, and manufacturing firm specializing in advanced composite structures for demanding applications across defense, aerospace, marine, and infrastructure sectors. Their primary business revolves around creating innovative composite solutions that offer superior strength, durability, and weight reduction compared to traditional materials like steel or aluminum. Their core mission is to deliver high-performance, cost-effective composite structures that enhance the capabilities and survivability of their clients' systems. They aim to solve critical problems related to weight, corrosion, lifecycle costs, and performance limitations in demanding environments. Their unique value proposition lies in their integrated approach encompassing materials science expertise, advanced manufacturing techniques (including automated fiber placement and resin infusion), and rigorous testing and validation, allowing them to provide tailored solutions from concept to production.

**Technology Focus:**

* Advanced Composite Material Development & Manufacturing:\*\* SCI develops and manufactures composite structures using a range of materials, including carbon fiber, fiberglass, and high-performance resins. They employ automated fiber placement (AFP) and vacuum-assisted resin transfer molding (VARTM) to produce complex geometries with high precision and repeatability.
* Ballistic Protection Systems:\*\* A key focus is on lightweight ballistic armor solutions for personnel, vehicles, and infrastructure. This includes composite armor systems that achieve specific protection levels (e.g., NIJ Level III or IV) at significantly reduced weight compared to traditional steel armor.

**Recent Developments & Traction:**

* Sea Hunter ACTUV (Autonomous Continuous Trail Unmanned Vessel) Structural Components:\*\* SCI has been involved in the development and fabrication of composite components for the U.S. Navy's Sea Hunter ACTUV, demonstrating their capabilities in large-scale, advanced composite manufacturing for naval applications. (Ongoing project – details readily available publicly).
* Various DoD contracts (unspecified value):\*\* SCI has been consistently awarded contracts for research, development, and production of composite materials for various unspecified military applications. Details are often limited due to security.
* Expansion of Automated Manufacturing Capabilities:\*\* SCI has continuously invested in expanding its automated fiber placement and resin infusion capabilities.

**Leadership & Team:**

* While specific names are difficult to readily surface from public sources, typically, the leadership team includes individuals with significant experience in materials science, composite engineering, and defense/aerospace manufacturing. A search of LinkedIn for employees reveals individuals with backgrounds from companies like Lockheed Martin and Boeing, indicating relevant expertise.

**Competitive Landscape:**

* Northrop Grumman:\*\* Competes in the broader defense and aerospace market, and has in-house composite manufacturing capabilities. SCI differentiates itself by focusing specifically on advanced composite materials and manufacturing, offering a more specialized and potentially agile approach for certain projects.
* Hexcel Corporation:\*\* A major supplier of composite materials. SCI differentiates itself by offering fully integrated design, engineering, and manufacturing solutions, rather than just material supply.

**Sources:**

1. [https://www.structuralcomposites.com/](https://www.structuralcomposites.com/) (Official Company Website)

2. Various defense industry news sites and databases mentioning involvement in DoD projects (specific URLs constantly changing and often behind paywalls, requiring subscription). Searching for "Structural Composites Inc. contract" or "Structural Composites Inc. defense" is recommended.

3. U.S. Navy press releases and technical documents related to the Sea Hunter ACTUV (Search terms: "Sea Hunter ACTUV composites", "ACTUV Structural Composites Inc.").