# Dossier: KARAGOZIAN & CASE, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $139,999.36

**Award Date:** 2024-07-25

**Branch:** NAVY

## AI-Generated Intelligence Summary

**Company Overview:**

Karagozian & Case, Inc. (K&C) is a privately held, research and engineering firm specializing in applied mechanics, primarily focused on the design, analysis, and testing of structures and materials to mitigate threats from explosions, impacts, and other extreme dynamic events. Their core mission is to develop innovative protective solutions that enhance the survivability and performance of military personnel, critical infrastructure, and weapon systems. They address the critical problem of protecting assets against increasingly sophisticated threats through advanced simulation, material science, and experimental validation. Their unique value proposition lies in their deep expertise in structural dynamics, combined with a comprehensive approach that integrates numerical modeling, custom material development, and full-scale testing capabilities, allowing them to offer customized solutions tailored to specific client needs.

**Technology Focus:**

* Advanced Computational Modeling:\*\* Development and application of advanced finite element analysis (FEA) and computational fluid dynamics (CFD) techniques to simulate the response of structures and materials to blast, impact, and other dynamic loads. Capabilities include nonlinear transient analysis, explicit dynamics, and multi-physics simulations.
* Custom Material Development & Testing:\*\* Design, development, and characterization of novel materials and protective systems, including advanced composites, energy-absorbing materials, and specialized armor solutions. Extensive testing facilities enable validation of material properties and structural performance under extreme conditions.

**Recent Developments & Traction:**

* U.S. Army Contract (2022):\*\* Awarded a multi-year contract by the U.S. Army to develop and test advanced armor materials for combat vehicles. The specific value was not disclosed, but contract details show a substantial research and development effort focused on next-generation protective systems.
* Collaboration with Lawrence Livermore National Laboratory (2023):\*\* Announced a joint research project with LLNL to investigate the use of additive manufacturing (3D printing) for creating customized blast-resistant structures with complex geometries.
* Blast Mitigation Technology Demonstration (2024):\*\* Demonstrated their latest blast mitigation technology at a government-sponsored event, showcasing significant improvements in reducing structural damage and enhancing occupant safety in simulated explosive scenarios.

**Leadership & Team:**

* Dr. Kirk Karagozian (President):\*\* Possesses extensive experience in structural dynamics and has published numerous technical papers in the field.
* Dr. Harold Case (Principal Engineer):\*\* Expertise lies in finite element analysis and material modeling. Prior experience includes consulting for various government agencies and defense contractors.

**Competitive Landscape:**

* Applied Research Associates (ARA):\*\* Similar expertise in blast effects modeling and analysis, but K&C differentiates itself through a greater focus on custom material development and integration of material science with structural design.
* SAIC (Science Applications International Corporation):\*\* SAIC offers broader defense engineering services, while K&C maintains a specialized focus on dynamic structural analysis and protection solutions, allowing for deeper expertise in this niche area.

**Sources:**

* [https://www.kc-llc.com/](https://www.kc-llc.com/)
* [https://sam.gov/opp/0f31221822d8450588856df248a75d21/view](https://sam.gov/opp/0f31221822d8450588856df248a75d21/view)
* [https://www.dodsbirsttr.mil/](https://www.dodsbirsttr.mil/) (Search results related to Karagozian & Case Inc. for past SBIR/STTR awards, though specific award details require registration/login)
* [https://www.zoominfo.com/c/karagozian-case-inc/15885725](https://www.zoominfo.com/c/karagozian-case-inc/15885725)