# Dossier: DESIGN ANALYSIS & RESEARCH CORP

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,995.00

**Award Date:** 2022-11-15

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Design Analysis & Research Corporation (DARcorporation) is a US-based engineering firm specializing in aerospace design, analysis, and research, with a mission to provide innovative solutions and advanced tools to aerospace manufacturers, government agencies, and research institutions. They focus on addressing the challenges of aircraft design optimization, aerodynamic performance enhancement, structural integrity, and regulatory compliance. Their unique value proposition lies in their integrated approach, combining advanced computational tools, cutting-edge research, and experienced aerospace engineers to deliver comprehensive solutions from initial concept design to certification. They offer specialized expertise in niche areas like unconventional aircraft design, hybrid propulsion, and advanced materials, positioning them as a go-to partner for challenging and innovative aerospace projects.

**Technology Focus:**

* Aircraft Design and Analysis Software:\*\* DARcorporation develops and licenses DARWIN, an integrated software suite for aircraft conceptual and preliminary design, performance analysis, stability & control analysis, and weight estimation. They provide customized versions of DARWIN to meet specific customer requirements.
* CFD & FEA Services:\*\* The company offers Computational Fluid Dynamics (CFD) and Finite Element Analysis (FEA) services, providing detailed aerodynamic analysis and structural analysis of aircraft components and entire aircraft configurations. They use high-fidelity modeling techniques to predict performance characteristics and ensure structural integrity.

**Recent Developments & Traction:**

* Continued DARWIN Software Updates:\*\* DARcorporation regularly releases updates to its DARWIN software suite, incorporating new features and improved algorithms based on customer feedback and ongoing research. These updates focus on enhancing usability, accuracy, and functionality.
* Research Contracts with NASA & DoD:\*\* DARcorporation has secured multiple Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) contracts from NASA and the Department of Defense (DoD) for advanced aerospace research projects, including the development of novel aircraft concepts and technologies.
* Partnerships with Aerospace Manufacturers:\*\* DARcorporation has announced strategic partnerships with several aerospace manufacturers to provide design and analysis services for new aircraft development programs. Specific details often remain confidential due to proprietary concerns.

**Leadership & Team:**

* Dr. Willem A. Anemaat:\*\* CEO and Founder, holds a Ph.D. in Aerospace Engineering and has extensive experience in aircraft design and analysis.
* Team:\*\* The company employs a team of highly skilled aerospace engineers with expertise in aerodynamics, structures, propulsion, and flight controls. Many team members hold advanced degrees and have experience working on major aerospace projects.

**Competitive Landscape:**

* Pointwise, Inc.:\*\* Specializes in meshing software for CFD, offering competing tools for pre-processing in the aerodynamic analysis workflow. DARcorporation's integrated DARWIN suite offers a broader scope, encompassing design and analysis in a single package.
* Altair Engineering:\*\* Provides simulation-driven design solutions, including CFD and FEA software. DARcorporation differentiates itself through its deep expertise in aerospace-specific applications and its focus on integrated solutions tailored to the unique needs of the aerospace industry.

**Sources:**

1. [https://www.darcorp.com/](https://www.darcorp.com/)

2. [https://sbir.nasa.gov/node/60294](https://sbir.nasa.gov/node/60294)

3. [https://www.dsmca.osd.mil/casestatus/letter/2019/SEA-19-0246.pdf](https://www.dsmca.osd.mil/casestatus/letter/2019/SEA-19-0246.pdf) - \*While not directly about DARCorporation, this document mentions them in relation to a foreign military sale.\*

4. [https://patents.google.com/patent/US8412479B2/en](https://patents.google.com/patent/US8412479B2/en)