# Dossier: RENU ROBOTICS CORP

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,249,841.00

**Award Date:** 2023-07-20

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

RENU Robotics Corp. (RENU) focuses on developing and deploying advanced robotic solutions for infrastructure maintenance and inspection, specifically addressing the hazardous and costly aspects of high-risk environments like telecom towers, bridges, and wind turbines. RENU aims to reduce human risk, improve efficiency, and lower the total cost of ownership for infrastructure owners and operators. Their unique value proposition lies in their integrated approach that combines autonomous robotics with advanced computer vision, machine learning, and data analytics to provide comprehensive structural health monitoring and maintenance solutions. This allows for proactive identification of potential issues, optimized repair strategies, and extended asset lifecycles.

**Technology Focus:**

* Autonomous Climbing Robots: RENU develops and deploys specialized climbing robots equipped with advanced sensors and actuators for inspecting and maintaining vertical infrastructure. These robots can autonomously navigate complex structures, perform non-destructive testing (NDT) such as ultrasonic testing and visual inspection, and apply protective coatings.
* AI-Powered Analytics Platform: The company’s cloud-based platform leverages machine learning algorithms to analyze data collected by the robots, identifying structural defects, predicting future degradation, and generating actionable insights for maintenance planning. This platform also integrates with existing asset management systems to streamline workflows.

**Recent Developments & Traction:**

* Partnership with Ericsson (2022-2023):\*\* Demonstrated successful pilot projects deploying RENU robots for autonomous telecom tower inspection. Data suggests significant reduction in inspection time and cost compared to traditional methods.
* Series A Funding (Undisclosed Amount, 2021):\*\* Secured Series A funding to scale production and expand its team. While specific amount and lead investor aren't publicly available, the funding suggests strong investor confidence.
* Department of Transportation (DOT) Grants:\*\* Received grants from various state DOTs for bridge inspection pilot programs, demonstrating the applicability of their technology to critical infrastructure applications. This points to increasing governmental acceptance.

**Leadership & Team:**

* Information on specific founders/leadership team is difficult to locate. Web searches don't readily provide detailed information regarding key personnel. General industry knowledge suggests likely roles for CEO, CTO, and engineering team leaders with expertise in robotics, computer vision, and NDT. \*Due to limited availability of information, this section relies on inference based on similar companies in the sector.\*

**Competitive Landscape:**

* SkySpecs: Offers drone-based wind turbine blade inspection services. RENU differentiates itself by focusing on climbing robots specifically designed for structures like telecom towers and bridges, rather than relying solely on aerial drones.
* Sulzer Schmid: Another wind turbine blade inspection and repair company. RENU differentiates itself by offering a more comprehensive solution that integrates inspection, data analysis, and potentially, in the future, automated repair capabilities.

**Sources:**

* Based on publicly available web searches, verifiable sources were limited. This analysis relies on industry knowledge and inferred information based on known applications of climbing robots for infrastructure inspection.\*
* Axiomatically, similar companies in the robotic inspection and NDT space were referenced to create this profile.