# Dossier: NORTHWEST RESEARCH ASSOCIATES, INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $149,973.98

**Award Date:** 2024-05-08

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Northwest Research Associates, Inc. (NWRA) is a research and development company specializing in solving complex scientific and engineering challenges for government and commercial clients. Their primary business is the creation of advanced solutions through basic and applied research, with a focus on space and atmospheric science, remote sensing, and advanced sensor technology. They address critical needs in areas such as national security, environmental monitoring, and space situational awareness. NWRA aims to provide innovative solutions by blending theoretical modeling, data analysis, and advanced technology development. Their unique value proposition lies in their ability to translate fundamental scientific principles into practical applications and deliver actionable insights derived from complex datasets.

**Technology Focus:**

* Advanced Radar Systems: NWRA develops and applies advanced radar technologies for atmospheric sensing, including coherent Doppler lidars, and for ISR (Intelligence, Surveillance, and Reconnaissance) applications. They specialize in developing algorithms for signal processing, target detection, and data fusion.
* Space Weather and Atmospheric Modeling: NWRA develops and utilizes sophisticated computer models to simulate and predict space weather effects on critical infrastructure and satellite systems. This includes ionospheric and thermospheric modeling and the development of algorithms for detecting and characterizing space weather events. They also model atmospheric propagation and turbulence for improving remote sensing and communications.

**Recent Developments & Traction:**

* Contract Awards (Ongoing):\*\* NWRA consistently receives contracts from various US government agencies, including the Department of Defense (DoD) and NASA, for research and development projects related to space weather, atmospheric sensing, and radar technology. Specific details of individual contracts are often not publicly disclosed but are regularly reported in government contracting databases.
* Advanced Sensor Development (Ongoing):\*\* NWRA has been actively involved in developing and testing advanced sensors for environmental monitoring and space situational awareness. Public information suggests continued refinements and enhancements of these sensors, with performance improvements demonstrated through various test campaigns.
* Participation in Scientific Conferences (Ongoing):\*\* NWRA researchers regularly present their findings at major scientific conferences in areas such as atmospheric science, space weather, and remote sensing. This includes presenting advancements in modeling, algorithm development, and sensor technology, demonstrating continued activity in these fields.

**Leadership & Team:**

* Information regarding specific leadership roles (CEO, CTO, President) is not readily available in a consolidated format. Examining NWRA's website or relevant news releases might yield these details, but they aren't immediately apparent. The company appears to be primarily structured around principal investigators and research scientists who lead specific projects. Prior experience generally consists of PhD-level expertise in related scientific fields.

**Competitive Landscape:**

* SRI International:\*\* Like NWRA, SRI International conducts research and development across various sectors, including defense, space, and environmental sciences. NWRA differentiates itself through a stronger specialization in atmospheric and space weather-related applications, coupled with their signal processing and algorithm development strengths.
* MITRE Corporation:\*\* MITRE is a non-profit organization that operates federally funded research and development centers. Similar to NWRA, it undertakes research and development for government clients. NWRA distinguishes itself by focusing on more specialized, smaller-scale projects and a tighter integration of sensor technology with data analysis capabilities.

**Sources:**

1. [https://nwra.com/](https://nwra.com/) - NWRA's official website provides a general overview of their research areas and capabilities.

2. [https://www.sam.gov/](https://www.sam.gov/) - System for Award Management (SAM.gov) to see details of federal contracts awarded to NWRA (Requires specific search terms).

3. [https://scholar.google.com/](https://scholar.google.com/) - Google Scholar can be used to find publications by NWRA researchers that detail their specific technologies and projects. Requires targeted searching by researcher name or NWRA as an affiliation.