

DEEP SPACE DYNAMICS

Securing America's Future in Space

EXECUTIVE SUMMARY

Neuman-B 6U SpaceDrone

100% American Aerospace Manufacturing
December 2025

The Challenge

Current deep space missions cost \$500M–\$2B and require 5–10 year development cycles. NASA's Planetary Defense Coordination Office and Space Force lack affordable, rapidly deployable platforms for persistent deep space operations. Traditional approaches create response latency for emerging threats and scientific opportunities.

Our Solution

The Neuman-B 6U SpaceDrone is a radiation-hardened autonomous spacecraft designed for Lagrange point operations. Through modular design, standardized interfaces, and careful component selection, we achieve an order-of-magnitude cost reduction while maintaining government-grade reliability.

KEY FINDINGS

10× cost reduction vs. traditional missions

100% domestic sourcing achieved

33 U.S. suppliers across 11 states

18 component categories—all domestic

Supply Chain Validation

Comprehensive bill of materials analysis confirms that every component category required for deep space operations—structure, attitude control, propulsion, power, communications, computing, sensors, and more—can be sourced from domestic suppliers with established government heritage.

Every supplier in our validated supply chain has NASA, Department of Defense, or National Reconnaissance Office flight-proven experience. Geographic distribution across 11 states provides natural supply chain resilience against regional disruptions.

U.S. Industrial Base Context

Our supply chain validation is supported by the strength of the U.S. aerospace industrial base:

- The United States controls 75% of global aerospace contractors
- Over 5,600 domestic aerospace firms provide supplier depth
- California, Florida, and Texas anchor robust manufacturing clusters
- Commercial space growth sustains supplier ecosystems

Target Applications

- **NASA PDCO:** Solar observation, space weather monitoring, NEO tracking
- **Space Force:** Cislunar domain awareness, ISR beyond GEO
- **NOAA:** Upstream solar wind monitoring for geomagnetic storm prediction
- **Commercial:** Deep space communications relay, technology demonstration

The Bottom Line

The Neuman-B demonstrates that strategic deep space systems can be manufactured entirely within the United States without sacrificing cost competitiveness or technical capability. America has the industrial capacity to build the next generation of space infrastructure with 100% domestic content.

LEARN MORE

Full case study available to qualified government and commercial partners

tom.erickson@deepspacedynamics.us
deepspacedynamics.us