# Dossier: TURION SPACE CORP

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,899,218.07

**Award Date:** 2024-06-07

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Turion Space is a U.S.-based space technology company focused on providing in-space services, specifically on-orbit servicing, debris removal, and space domain awareness. The company aims to mitigate the growing threat of space debris and extend the lifespan of existing satellites. Their unique value proposition lies in the development of cost-effective robotic spacecraft capable of both removing defunct satellites and upgrading or refueling operational ones, thereby reducing the overall cost of space operations and enhancing the sustainability of the space environment. They are positioning themselves as a leader in building and operating a comprehensive in-space infrastructure to support the long-term viability of space activities.

**Technology Focus:**

* Droid Spacecraft:\*\* Developing and deploying autonomous spacecraft (Droid-001, Droid-002 planned) capable of rendezvous, proximity operations, robotic manipulation, and refueling. Early Droids are designed to remove at least one derelict satellite per mission.
* Advanced Robotic Arm Systems:\*\* Incorporating sophisticated robotic arm systems to grapple, manipulate, and perform maintenance on satellites in orbit.
* AI-Powered Autonomous Navigation:\*\* Utilizing artificial intelligence to enable autonomous navigation, target acquisition, and debris avoidance, optimizing mission efficiency and safety.

**Recent Developments & Traction:**

* October 2023:\*\* Announced partnership with Sierra Space to support on-orbit servicing and manufacturing capabilities.
* August 2023:\*\* Awarded a Small Business Innovation Research (SBIR) Phase II contract from the U.S. Space Force for development of an autonomous proximity operations and docking system.
* September 2022:\*\* Closed a $14 million Series A funding round led by Space Capital, with participation from Expon Capital and Alumni Ventures.
* 2021 - Present:\*\* Multiple contracts with government and commercial entities to demonstrate technologies, develop mission concepts, and design advanced components for on-orbit servicing.

**Leadership & Team:**

* Ryan McDevitt (CEO):\*\* Formerly with Boeing's Space and Intelligence Systems division, possessing extensive experience in satellite systems engineering and program management.
* Tyler Evans (CTO):\*\* Held multiple roles within engineering at Virgin Orbit, with expertise in propulsion and in-space propulsion systems.
* Heath Niemi (President):\*\* Former Managing Director at Space Angels, with deep expertise in aerospace investing.

**Competitive Landscape:**

* Northrop Grumman (Mission Extension Vehicle):\*\* Northrop Grumman's MEV provides satellite life extension services, but primarily focuses on geostationary satellites and doesn't offer debris removal. Turion Space aims to be more agile and cost-effective, targeting a wider range of orbits and offering a broader suite of in-space services.
* Astroscale:\*\* Astroscale is a Japanese company focused primarily on debris removal. Turion Space differentiates itself by combining debris removal with other in-space services, such as satellite refueling and upgrades, potentially offering a more comprehensive and integrated solution.

**Sources:**

* [https://turionspace.com/](https://turionspace.com/)
* [https://spacecapital.com/portfolio/turion-space](https://spacecapital.com/portfolio/turion-space)
* [https://spacenews.com/turion-space-raises-14-million/](https://spacenews.com/turion-space-raises-14-million/)
* [https://www.sierraspace.com/press-releases/sierra-space-partners-with-turion-space-to-support-on-orbit-servicing-and-manufacturing-capabilities/](https://www.sierraspace.com/press-releases/sierra-space-partners-with-turion-space-to-support-on-orbit-servicing-and-manufacturing-capabilities/)