# Dossier: ABOVE: ORBITAL INC.

## SBIR Award Details

**Award Title:** N/A

**Amount:** $74,997.00

**Award Date:** 2023-05-02

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

ABOVE: ORBITAL INC. (formerly known as Altius Space Machines) specializes in on-orbit satellite servicing, spacecraft rendezvous, and proximity operations (RPO) capabilities. The company aims to extend the life, enhance the performance, and reduce the costs associated with operating satellites in space, addressing the growing need for sustainable space operations. They are focused on providing solutions for in-space assembly, manufacturing, and refueling, ultimately fostering a more robust and responsible space economy. Their unique value proposition lies in their proprietary technologies and expertise in robotic in-space maneuvering and docking, offering a cost-effective alternative to launching new satellites or decommissioning existing ones prematurely.

**Technology Focus:**

* Dextrous Robotic Arms:\*\* Development and deployment of robotic arms designed for in-space manipulation, including grappling, refueling, and component replacement on satellites. Specifics include demonstrated grasping of rotating targets and force feedback capabilities for delicate operations.
* Satellite Rendezvous and Proximity Operations (RPO) Systems:\*\* Developing autonomous navigation and control systems enabling spacecraft to safely and reliably approach and dock with other objects in orbit. This includes advanced sensor suites and algorithms for precise positioning and control.

**Recent Developments & Traction:**

* Acquisition by Voyager Space:\*\* Announced acquisition by Voyager Space in July 2022, expanding Voyager's in-space infrastructure capabilities. This suggests a validation of the company's technology and potential for growth within a larger space-focused holding company.
* Successful On-Orbit Demonstration Missions:\*\* Completed several successful on-orbit demonstrations of their rendezvous and proximity operations (RPO) technology, showcasing the ability to approach and dock with simulated satellite targets. (Dates and mission specifics vary - need further restricted access information for details).
* Government Contracts:\*\* Awarded multiple contracts by U.S. Space Force and other government agencies to develop and test their on-orbit servicing capabilities, indicating strong interest and support from the defense sector.

**Leadership & Team:**

* Jonathan Goff (CEO):\*\* Experienced aerospace engineer with a background in propulsion systems and spacecraft design. He has a demonstrated history of leading and scaling space-focused technology companies.
* Additional team members:\*\* The company boasts a technical team consisting of aerospace engineers, roboticists, and software developers with experience from leading space companies and research institutions.

**Competitive Landscape:**

* Northrop Grumman (SpaceLogistics):\*\* Operates the Mission Extension Vehicle (MEV) program, a direct competitor in satellite life extension services.
* Differentiator:\*\* ABOVE: ORBITAL INC. differentiates itself through its focus on robotic in-space servicing, manufacturing, and assembly, offering a broader range of capabilities beyond simple life extension, including the potential for more complex on-orbit repairs and upgrades.

**Sources:**

1. [https://voyagerspace.com/voyager-space-acquires-altius-space-machines/](https://voyagerspace.com/voyager-space-acquires-altius-space-machines/)

2. [https://www.parabolicarc.com/2022/07/05/voyager-space-acquires-altius-space-machines/](https://www.parabolicarc.com/2022/07/05/voyager-space-acquires-altius-space-machines/)

3. [https://www.aboveorbital.com/](https://www.aboveorbital.com/)