# Dossier: ORBIT FAB, INC

## SBIR Award Details

**Award Title:** N/A

**Amount:** $1,699,818.00

**Award Date:** 2023-04-06

**Branch:** USAF

## AI-Generated Intelligence Summary

**Company Overview:**

Orbit Fab, Inc. is a US-based company pioneering on-orbit refueling and servicing of satellites. Their core mission is to enable a robust in-space economy by providing the infrastructure necessary for satellites to extend their lifespan, maneuver more freely, and access new orbits. The company aims to solve the limitations imposed by finite fuel capacity and the lack of in-space support infrastructure, thereby reducing space debris, improving satellite utilization, and enabling new space-based capabilities. Their unique value proposition lies in their development of both the refueling hardware and the logistical framework (propellant depots) needed for a comprehensive and sustainable on-orbit refueling ecosystem. They intend to make space a commercially viable operating domain, removing the traditional constraints of "single-use" satellites.

**Technology Focus:**

* Rapidly Attachable Fluid Transfer Interface (RAFTI): A standardized, dockable refueling port that allows different types of spacecraft to connect and transfer propellant. RAFTI is designed for autonomous docking and propellant transfer, minimizing operational complexity.
* Tanks on Demand (TOD): Orbital propellant depots providing propellant to spacecraft on-orbit, increasing mission lifespans and maneuverability. Specifics regarding current depot capacities are proprietary, but the goal is scalability.

**Recent Developments & Traction:**

* August 17, 2023: Orbit Fab announced it had successfully conducted an on-orbit propellant transfer test aboard its first tanker, Tanker-001 Tenzing, in Low Earth Orbit.
* February 2023: Secured a Space Systems Command (SSC) contract for its Rapidly Attachable Fluid Transfer Interface (RAFTI) to test the interface on a GEO satellite.
* March 2022: Raised $28.5 million in a Series A funding round led by Lockheed Martin Ventures and joined by SpaceFund and others.

**Leadership & Team:**

* Daniel Faber (CEO): Previously CEO of Deep Space Industries (acquired by Bradford Space).
* Dr. James Bultitude (Chief Engineer): Background in propulsion systems and space mission architecture.

**Competitive Landscape:**

* SpaceLogistics LLC (a Northrop Grumman company): Offers Mission Extension Vehicles (MEVs) that dock with existing satellites to extend their operational life. Orbit Fab differentiates itself through its refueling-focused approach, enabling any RAFTI-compatible satellite to access propellant rather than relying on proprietary extension vehicles.
* Momentus: Develops in-space transportation and infrastructure services, including water-based propulsion systems. While Momentus aims to move satellites between orbits, Orbit Fab's focus is explicitly on propellant supply and infrastructure for extending on-orbit lifespan.

**Sources:**

* [https://orbitfab.com/](https://orbitfab.com/)
* [https://spacenews.com/orbit-fab-conducts-first-on-orbit-propellant-transfer/](https://spacenews.com/orbit-fab-conducts-first-on-orbit-propellant-transfer/)
* [https://www.parabolicarc.com/2022/03/29/orbit-fab-raises-28-5-million-for-satellite-fueling/](https://www.parabolicarc.com/2022/03/29/orbit-fab-raises-28-5-million-for-satellite-fueling/)
* [https://www.defenseworld.net/2023/02/25/space-systems-command-awards-orbit-fab-to-test-rapidly-attachable-fluid-transfer-interface-on-geo-satellite.html](https://www.defenseworld.net/2023/02/25/space-systems-command-awards-orbit-fab-to-test-rapidly-attachable-fluid-transfer-interface-on-geo-satellite.html)