

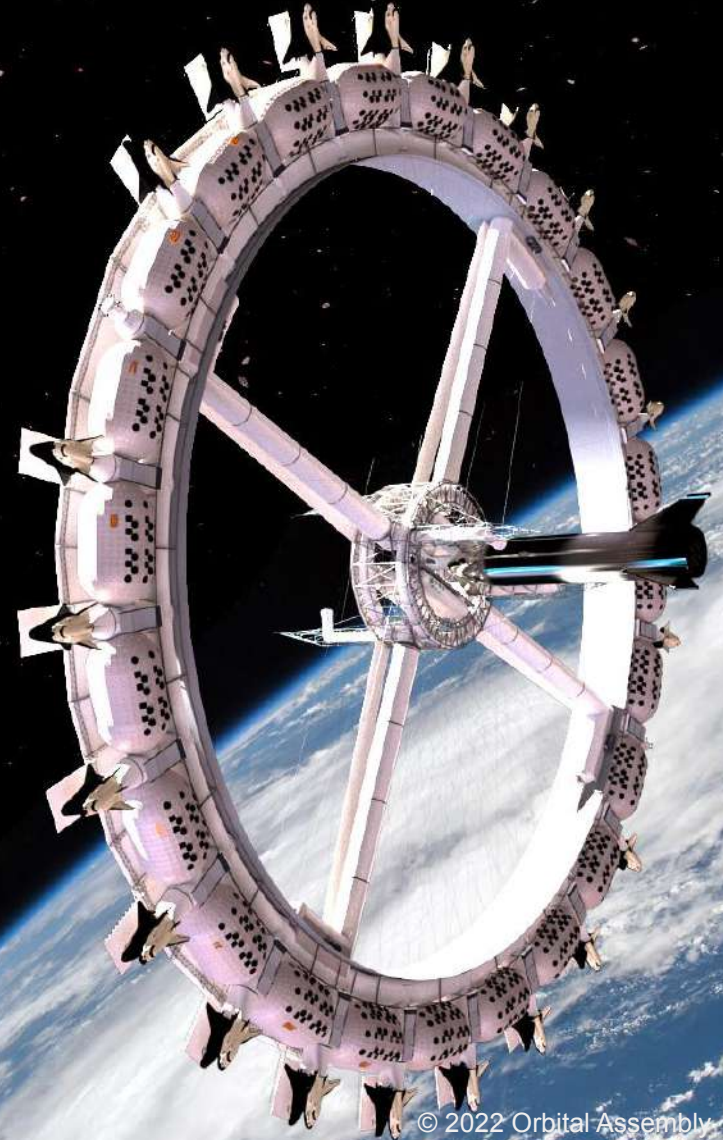


# ORBITAL ASSEMBLY

Aims to develop and operate profitable,  
space business parks with gravity a  
decade ahead of its competitors.

***We Provide Gravity™***

Proprietary - Not for Distribution - Shared under NDA



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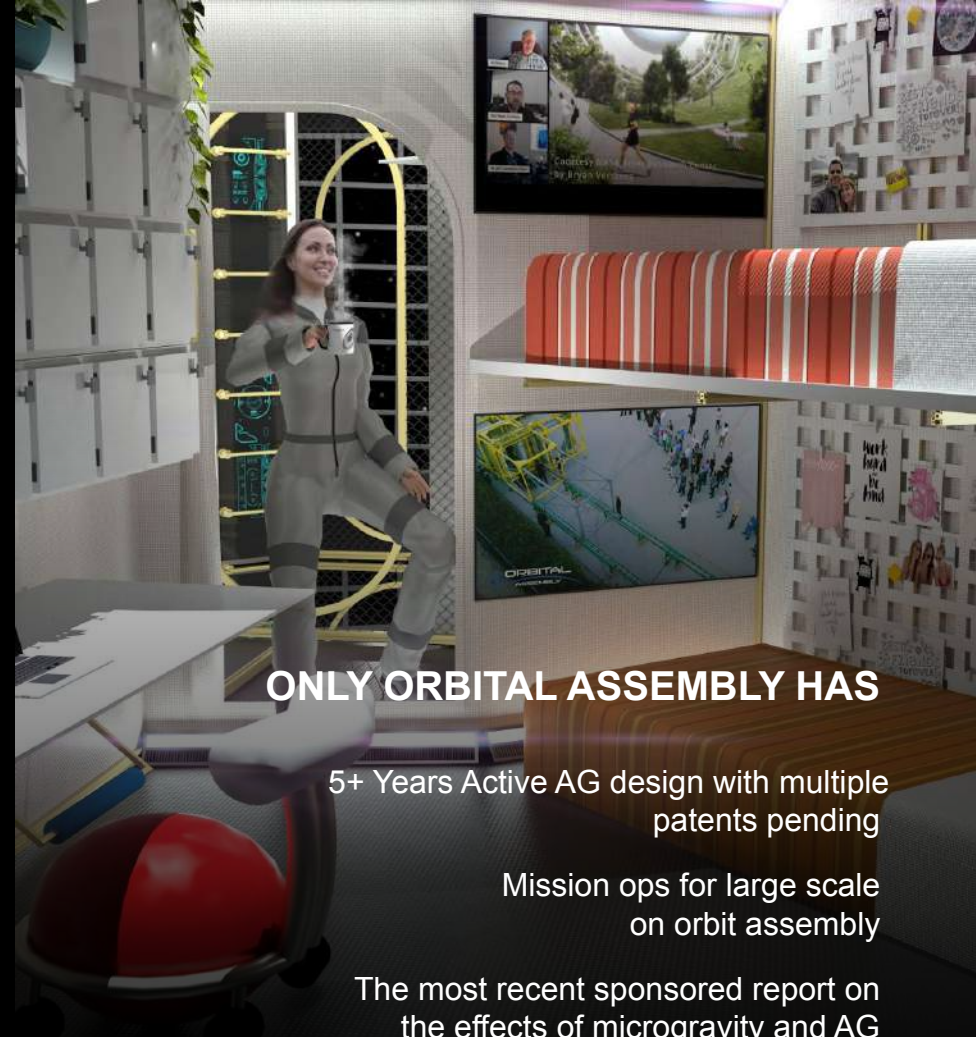
Orbital Assembly was established to develop, and operate profitable, space-based business parks with gravity a **decade ahead of its competitors.**

## *We Provide Gravity™*

### **GRAVITY**

Gravity in space alleviates serious medical conditions due to weightlessness, leading to an environment promoting profitable operations.

We believe that gravity will significantly reduce the frequency of replacing humans in orbit, by our estimates lowering annual operating costs by as much as 75%, which translates to an estimated \$150 million savings per astronaut tenant on our stations.



**ONLY ORBITAL ASSEMBLY HAS**

5+ Years Active AG design with multiple patents pending

Mission ops for large scale on orbit assembly

The most recent sponsored report on the effects of microgravity and AG countermeasures

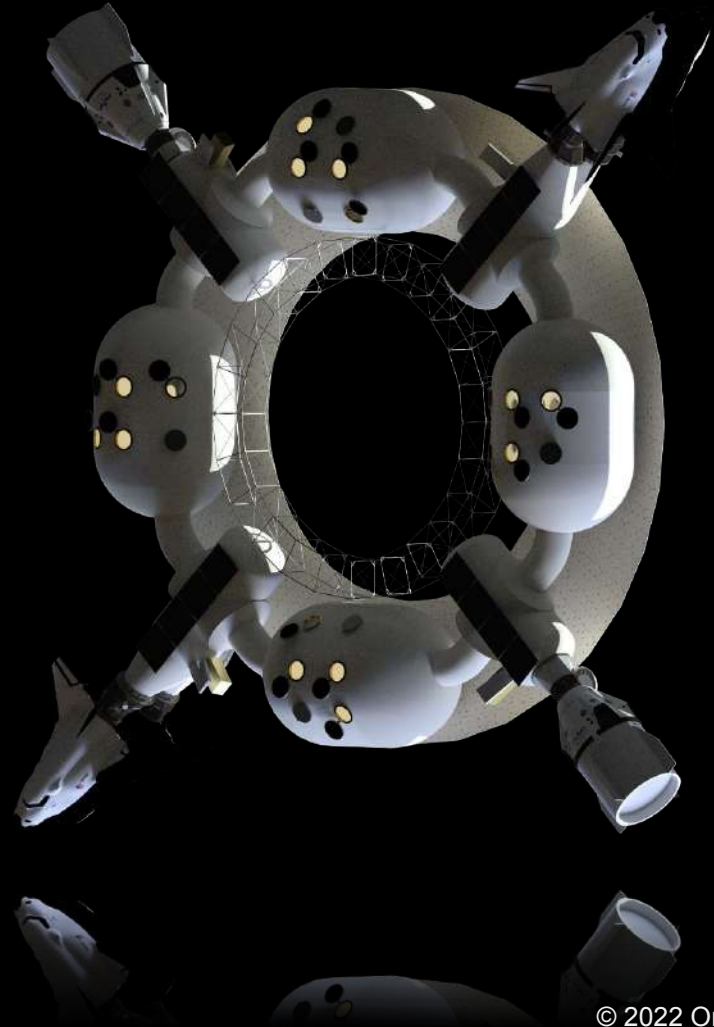
# SPACE BUSINESS PARK WITH GRAVITY.

The **Pioneer-class™**, planned to be one of the world's first and largest hybrid-gravity™ space stations for both work and stay, featuring spacious microgravity modules, and the rotating *Gravity Ring™*.

CONSTRUCTION TIME	24 to 42 MO
SCALABLE OCCUPANCY	28 to 54
HYBRID- GRAVITY	0 G - .57 G
VOLUME	2,080 to 4,000 m3**
PLANNED OPERATION	Late 2025*

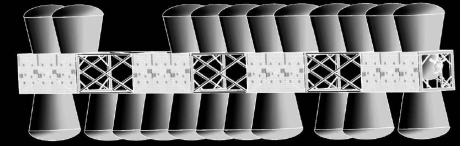
\*Pioneer Phase 1, Funding contingent

\*\*Comparable to 31 to 59 shipping containers





## ORBITAL ASSEMBLY'S PLATFORMS: FEED FORWARD ARCHITECTURE



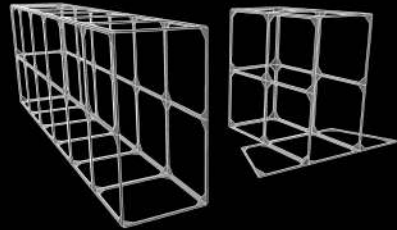
Orbital Assembly's patent-pending truss assembly machines can build versatile platforms for customer specific orbital applications; from autonomous orbital staging to habitable structures.



**CONFIGURABLE FOR MULTIPLE MARKETS**

**"INERT" PAYLOADS OR LIVE DATA  
PROCESSING**

**"MOVEMENT WITHOUT REGRET"**

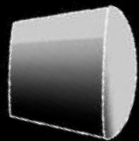


Orbital Assembly's standardized payload modules are backwards compatible to meet current and future mission design, accommodating near term unmanned micro-g staging depots and scaling to crewed platforms.

**STANDARDIZED**

**LOW END-USER OVERHEAD**

**RAPID TIME TO MARKET**



# PIONEER-CLASS STATION

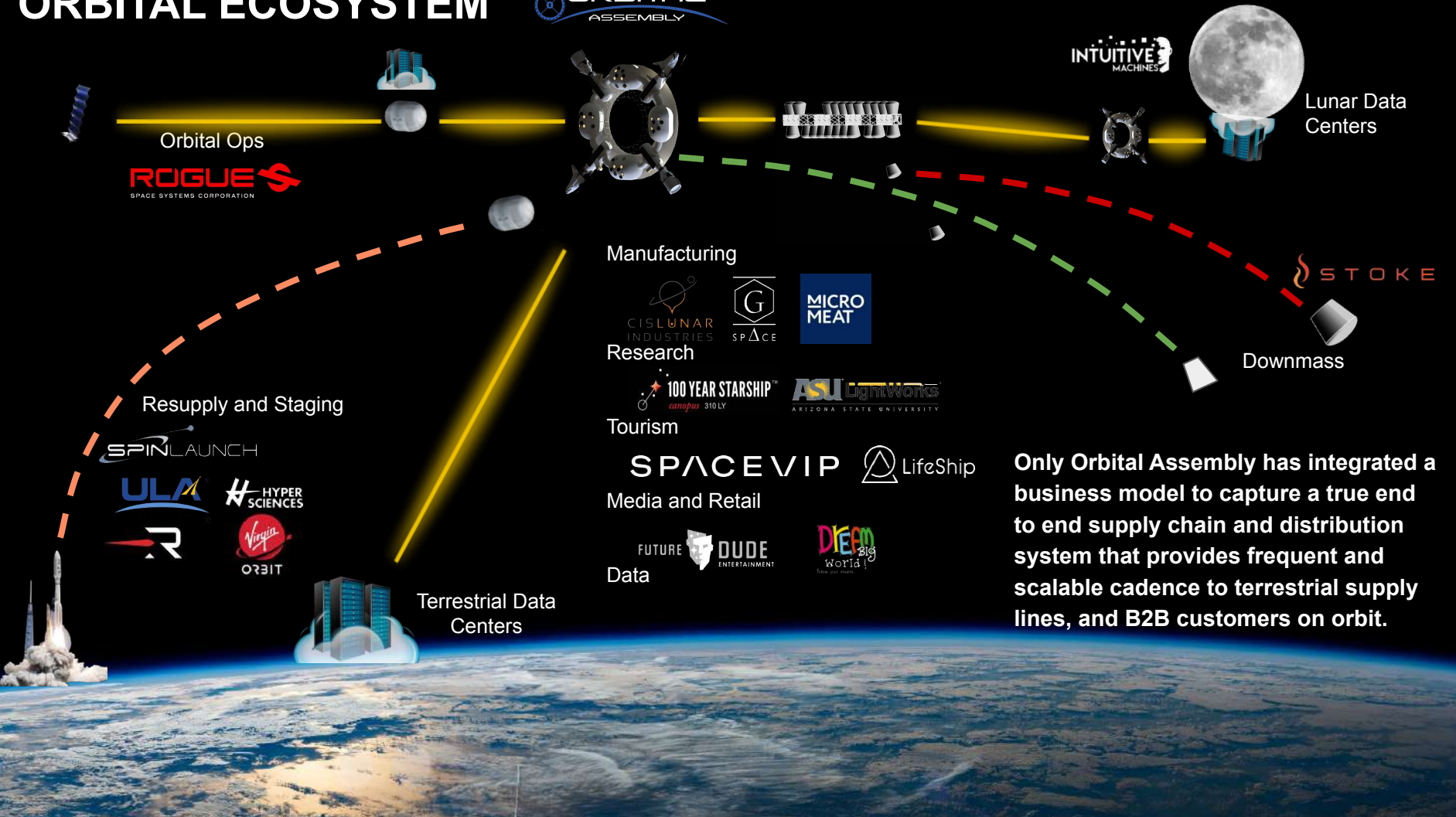
## Vertical Markets:

- Earth-to-space and space-to-space logistics
- Commercial production & R&D facilities
- Up to 54 space tenants and tourists for long term stay (months)
- Command, Control, and Communications (C3)
- Business to Business in situ markets for anticipated revenue ready missions and profitability in as soon as 28 mo.

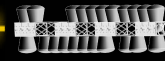
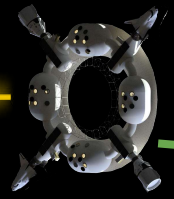


Conceptual Render of Section Cut through Pioneer Station Module. Showing half Module. +/- 200 m3

# ORBITAL ECOSYSTEM



Orbital Ops



Lunar Data Centers

Manufacturing



Research



Tourism



Media and Retail



Resupply and Staging



Terrestrial Data Centers



Downmass

Only Orbital Assembly has integrated a business model to capture a true end to end supply chain and distribution system that provides frequent and scalable cadence to terrestrial supply lines, and B2B customers on orbit.

# COMPETITIVE ADVANTAGE

FIRST MOVER  
28 Mo\*

GRAVITY  
Up to 0.57 G

LARGEST CAPACITY  
4-54 occupants\*\*

MOST POWER  
Up to 200 kW

LARGEST VOLUME  
400-4,000 m3\*\*

0.0 G

MIN. GRAVITY

0.75 G

MAX. GRAVITY

- ISS
- ORBITAL REEF
- **PIONEER Phase 1**
- AxSTATION
- STARLAB

3000  
2250  
1500  
750  
0  
VOLUME m3  
PRESSURIZED



Orbital  
Assembly  
**PIONEER**  
Phase 3

• **PIONEER**  
Phase 2

# ORBITAL ASSEMBLY, ADDRESSING CURRENT UNMET MARKET DEMAND

The entire landscape of space access is undergoing a dramatic revolution; Orbital Assembly's plans exploit that to the fullest and set us apart from our competition.



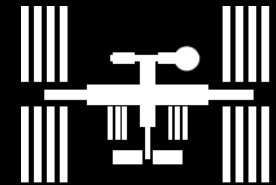
## LOWER LAUNCH COSTS

DOWN 99% BY 2025



## SATELLITE BOOM

INCREASED DEMAND FOR  
SPACE-TO-SPACE LOGISTICS  
3+ YEAR ISS BACKLOG

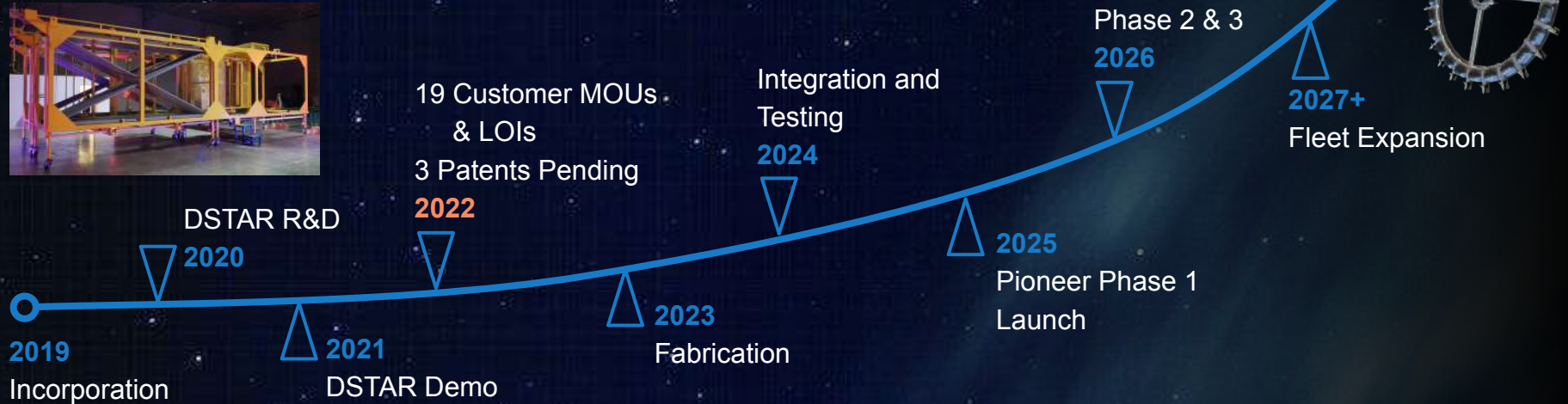
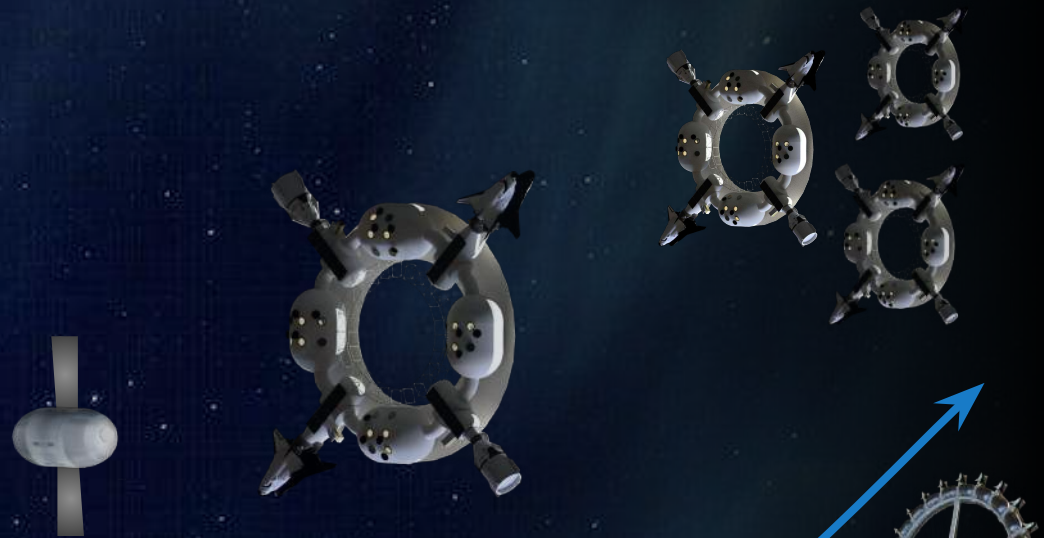


## COTS & COGS

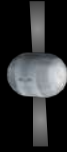
COST REDUCTIONS OF COGS /  
MORE AVAILABLE COTS FOR  
HABITABLE STATIONS  
FLIGHT PROVEN HARDWARE



# ORBITAL ASSEMBLY'S BENCHMARKS AND STRATEGIC ROADMAP

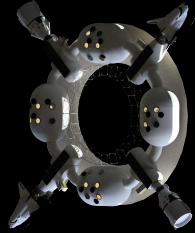


**DELIVERY**  
**PHASE 1**  
2023-2025



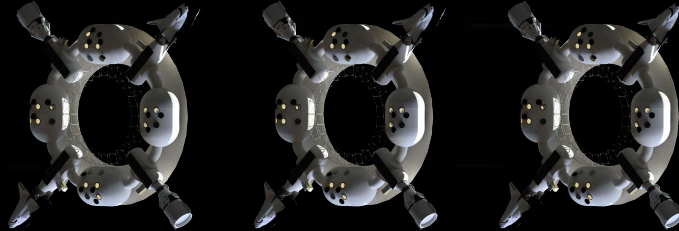
400M<sup>3</sup>+ anticipated profitable micro-gravity station. (Equivalent volume of 6 Shipping Containers)

**GRAVITY**  
**PHASES 2 & 3**  
2026-2028



With profits and secured investments, we can accommodate up to three fully functioning Stations by 2029.

**EXPANSION**  
**PHASES 4+**  
2028 +



**GROWTH**  
PROFITS REINVESTED TO GROW FLEET

Capacity to position stations anywhere in cislunar space, Mars, and beyond.



# CORE TEAM

**Space Real Estate Development Company** using space flight heritage commercial off the shelf (COTS) products and our own innovative proprietary technology to build hybrid-gravity space stations with artificial gravity.

**Over 150 years** of space heritage, business development, entrepreneurship, and over 30 successful space missions.



Rhonda Stevenson  
**CEO**  
**President**



Tim Alatorre, NCARB  
**COO**  
**Chair of the Board**  
**Co-founder**



Thomas Spilker, Ph.D.  
**CTO**  
**Vice Chair of the Board**  
**Co-founder**



Rob Miyake  
**Senior Thermal Engineer**  
**Board Member, Co-founder**

# STRATEGIC PARTNERS



**FIRST MOVER ADVANTAGE**

**PROFITABILITY IN AS SOON AS 24 MONTHS**

**ECONOMIES OF SCALE**

**VERSATILE PRODUCTS THAT SCALE TO HABITABILITY**

**SCALABILITY AND MODULARITY**

**PROPRIETARY ADVANTAGE**

**PROFITABLE FEED FORWARD ARCHITECTURE**



## **CONTACT**

Rhonda Stevenson, CEO

[RStevenson@orbitalassembly.com](mailto:RStevenson@orbitalassembly.com)



# ORBITAL

## ASSEMBLY

Thank You

*We Provide Gravity™*