

The logo for VAST, featuring the letters 'V', 'A', 'S', and 'T' in a bold, white, sans-serif font. The 'A' is stylized with a wide, flat top. The background of the entire image is a photograph of the Earth's horizon from space, showing a thin blue atmosphere and a bright orange-yellow glow from the sun or moon just below the horizon line. Four small white plus signs are positioned at the corners of the image: top-left, top-right, bottom-left, and bottom-right.

VAST

Building Next-Generation Space Stations

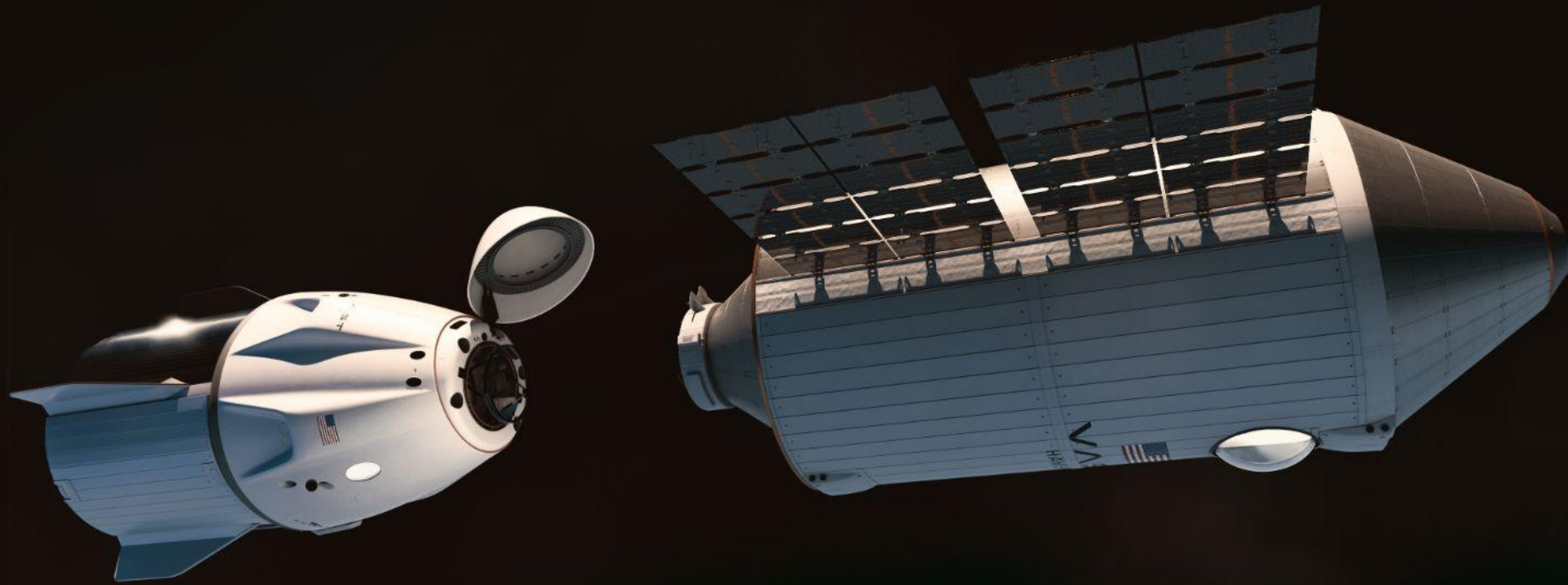
**Founded in 2021 by Jed McCaleb,
Vast is developing humanity's
next-generation space stations
and pioneering the path to
long-term living and thriving
in space.**



Our zero to one — Haven-1

SET TO LAUNCH IN MAY 2026

- Build our team, facilities, and development process
- Build and prove our technology and systems in space
- Prove the safety and speed of our low-cost model to the market
- Generate revenue over four crewed missions with payloads and partnerships from 2026-2029



Haven-1

The world's first commercial space station

- Two-week missions
- Crew of 4
- Transport via SpaceX Dragon
- Three year lifespan
- 45 m³ of habitable volume
- Personal sleeping quarters
- 1.1 m domed window
- Deployable communal table
- SpaceX Starlink connectivity
- 10x payload facilities
- Designed for commercial activities



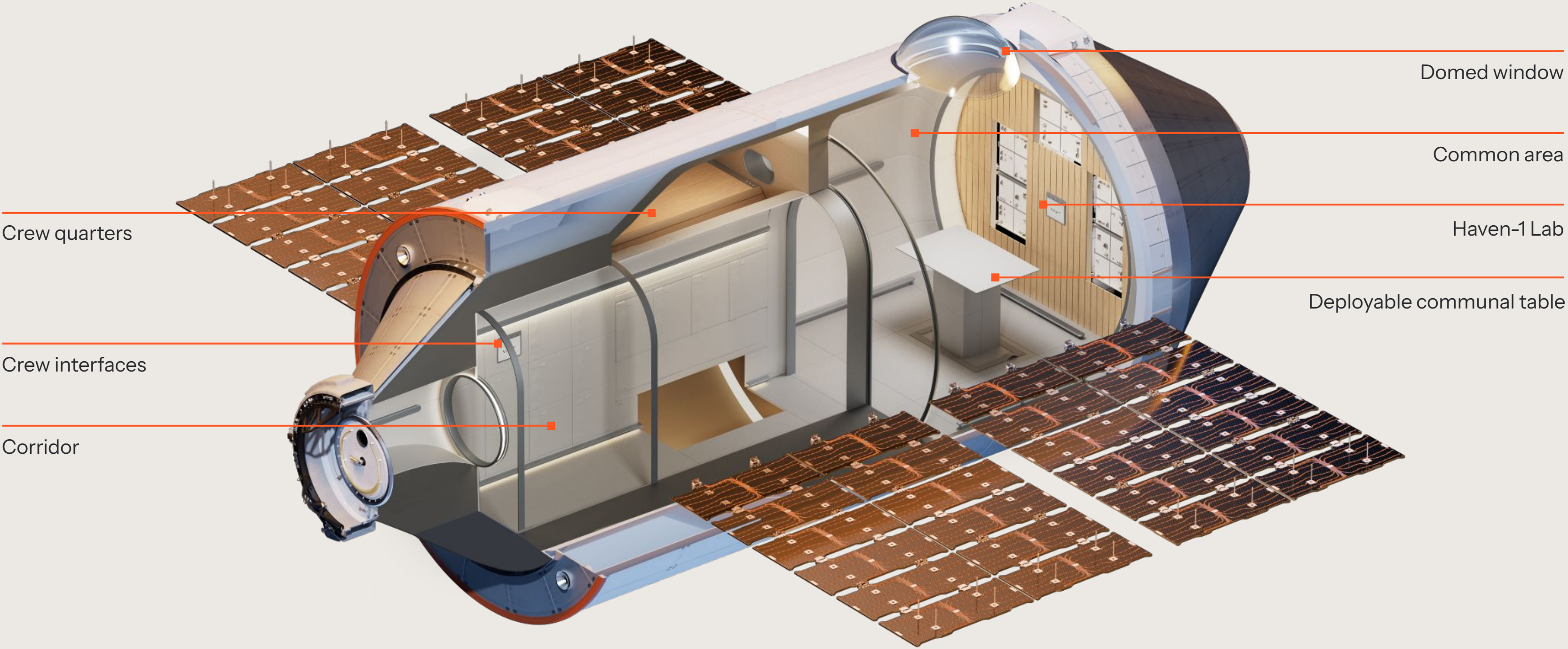
Haven-1

Specifications

Diameter	4.4 m
Height	10.1 m
Habitable volume	45 m ³
Pressurized volume	80 m ³
Mass	14,600 kg
Power	13,200 W
Orbit	51.6°, 425 km
Crew capacity	4



Haven-1 Interior



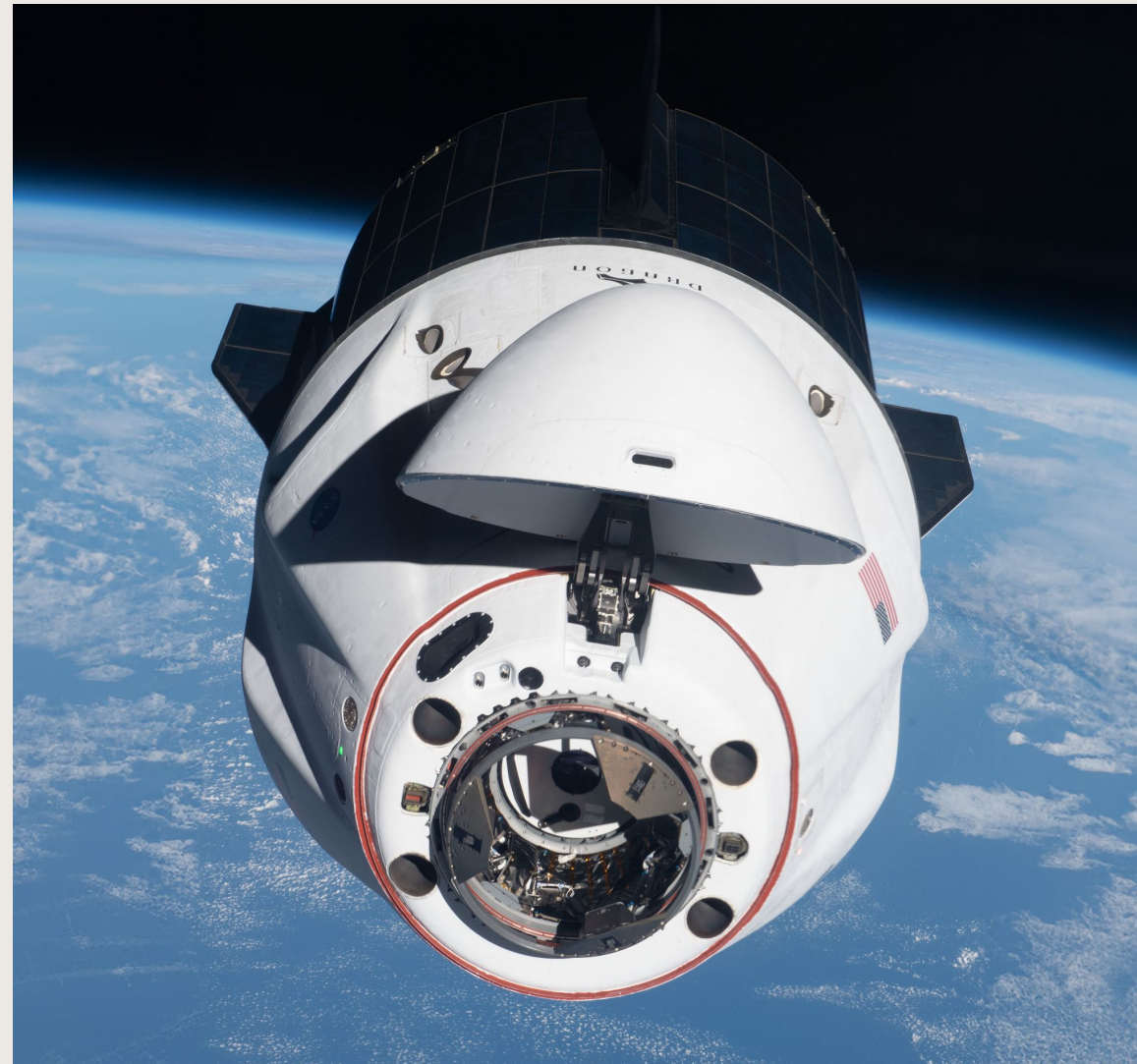
SpaceX Mission Partnership

SpaceX will launch Haven-1 on a Falcon 9 rocket and transport the crew using its Dragon spacecraft. Haven-1 will feature Starlink — SpaceX's high-speed internet — providing gigabit speeds and low-latency connectivity via laser terminals to the Starlink satellite network. The use of Starlink on Haven-1 will mark the first deployment of Starlink internet on a commercial space station.

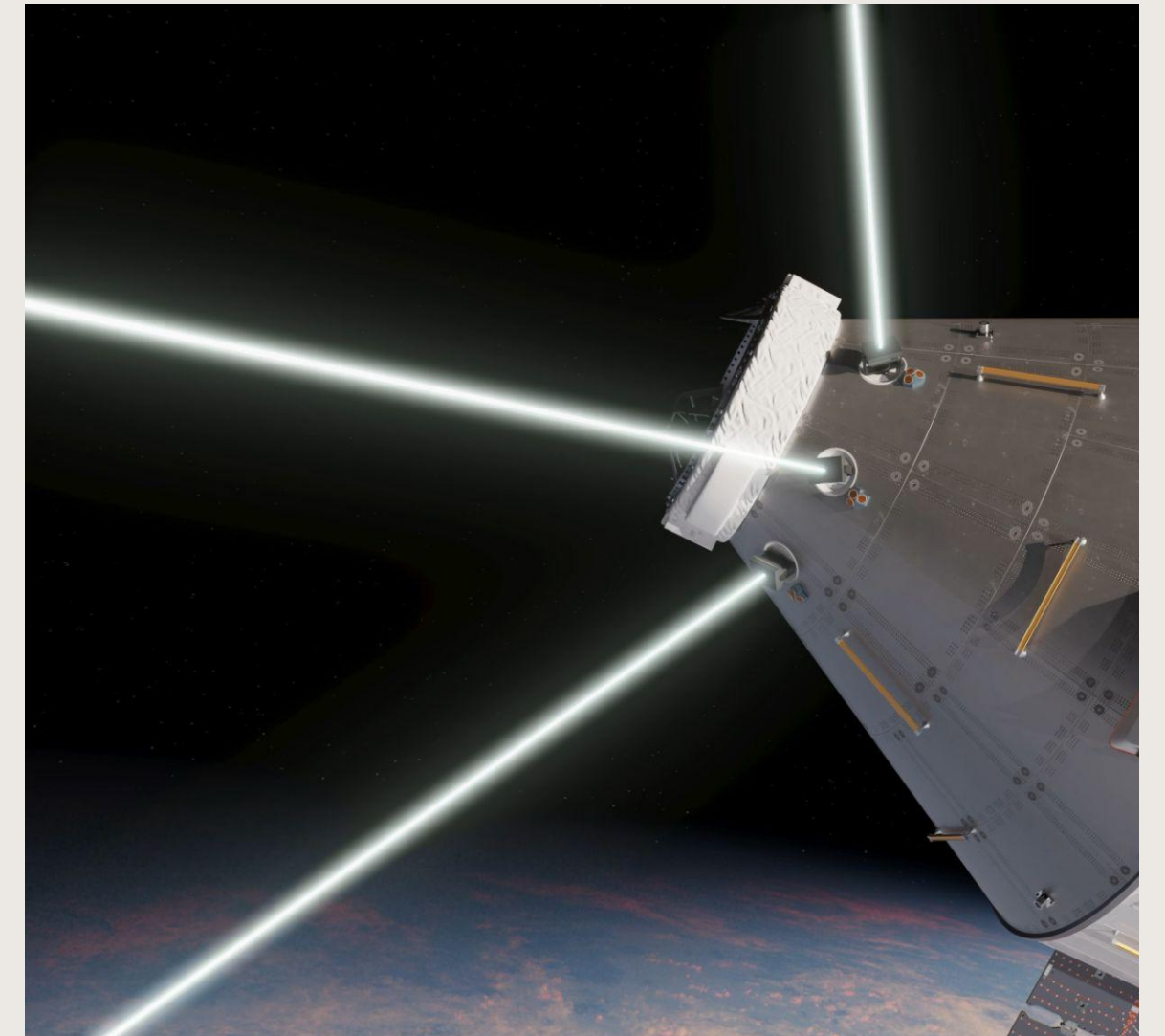
SPACEX



SpaceX Falcon 9 launch vehicle



SpaceX Dragon spacecraft



Starlink high-speed internet

Haven-1 Lab

The world's first microgravity research, development, and manufacturing platform on a commercial space station.

Full ISS EXPRESS Rack Capacity

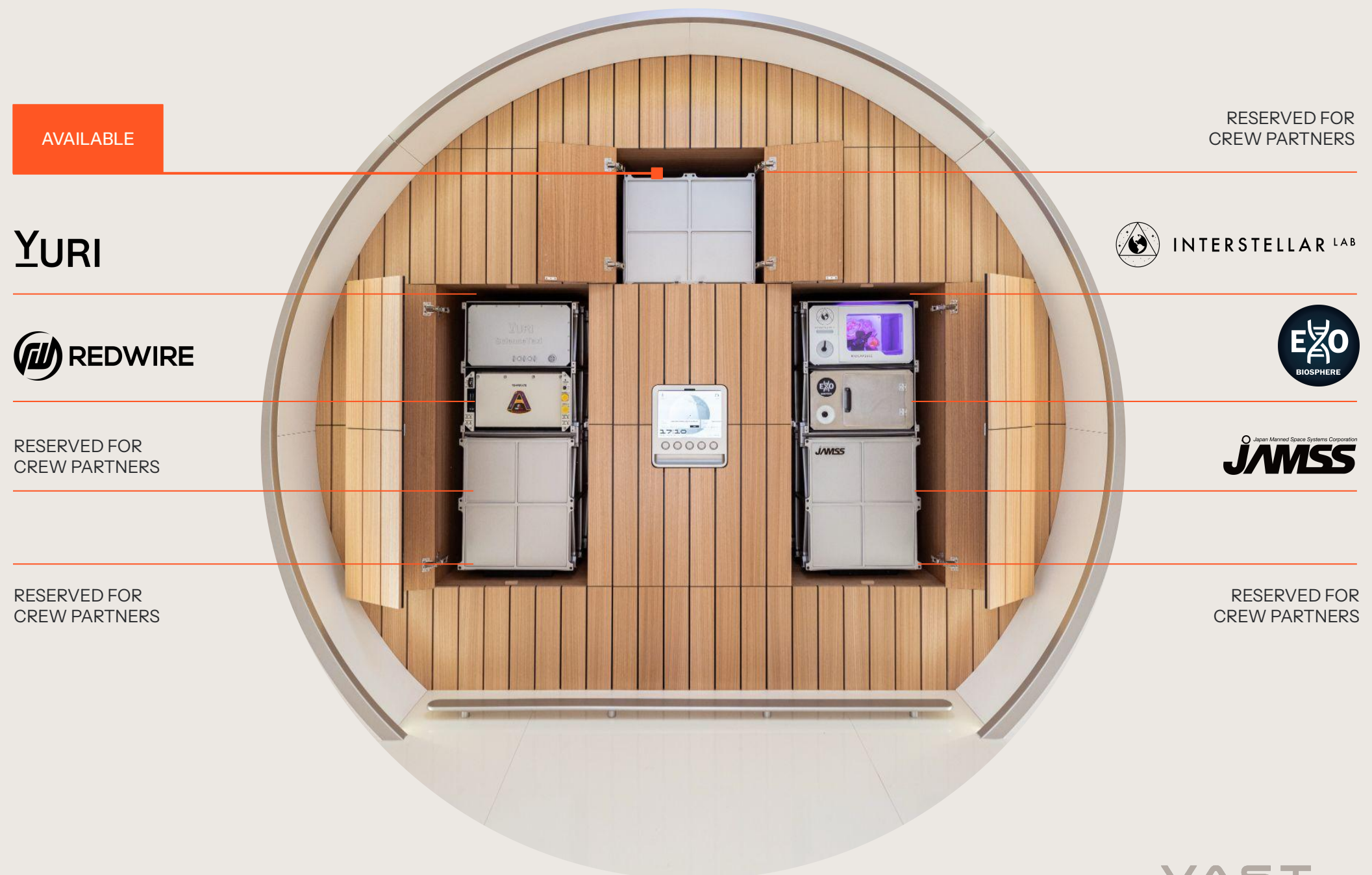
- Ten air-cooled Middeck Locker Equivalent (MLE) payload slots
- Research, tech demonstration, and manufacturing in microgravity

Payload Operations

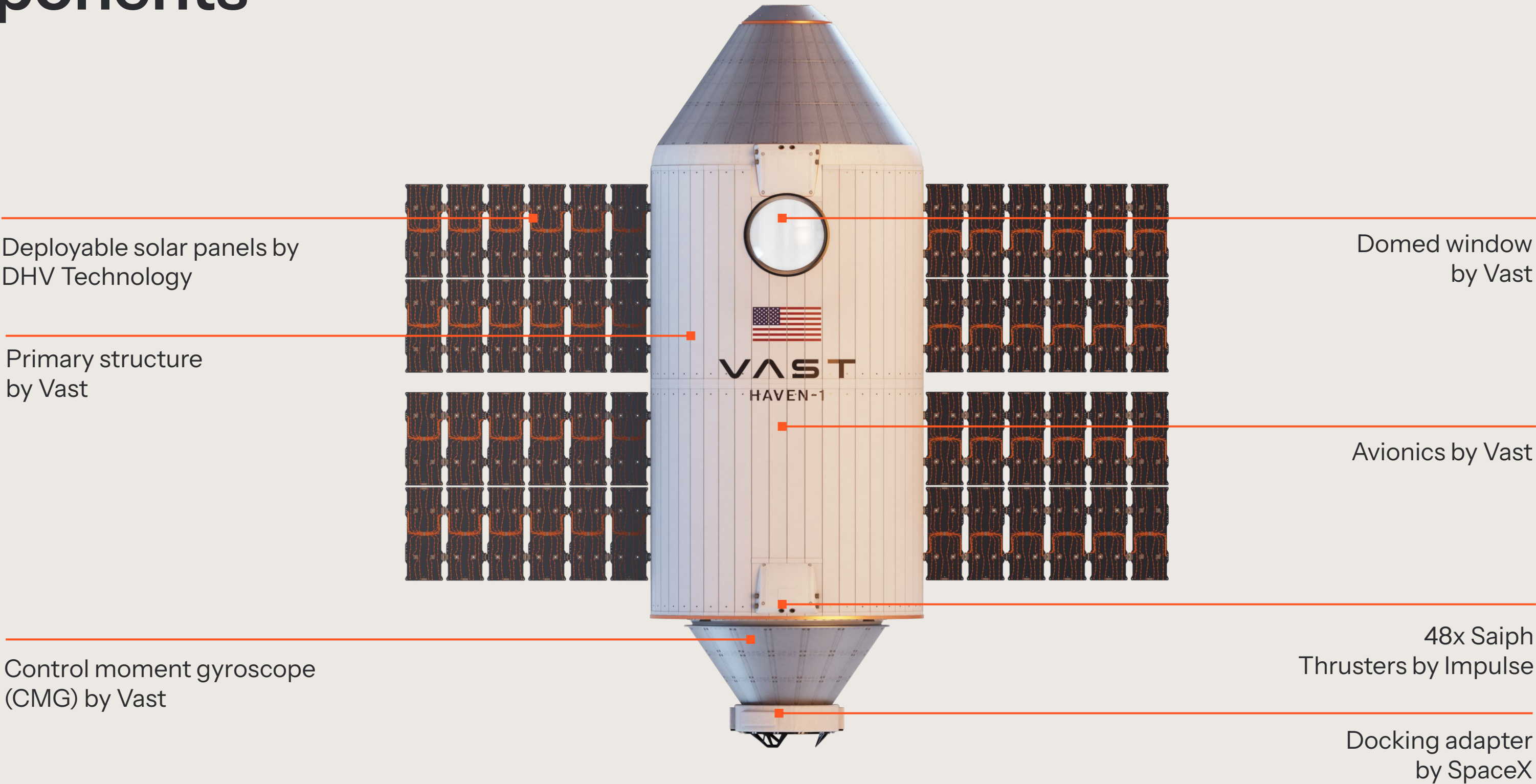
- Up to 30 kg per locker with 100 W of power
- Operated by Haven-1 astronaut crew
- Remotely commanded and monitored via Starlink gigabit-speed Internet

Commercial Product Delivery and Return

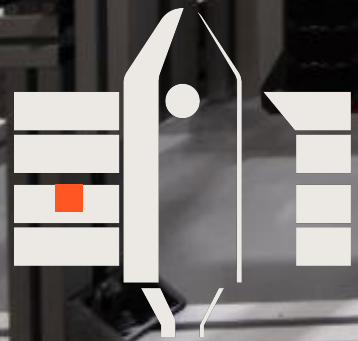
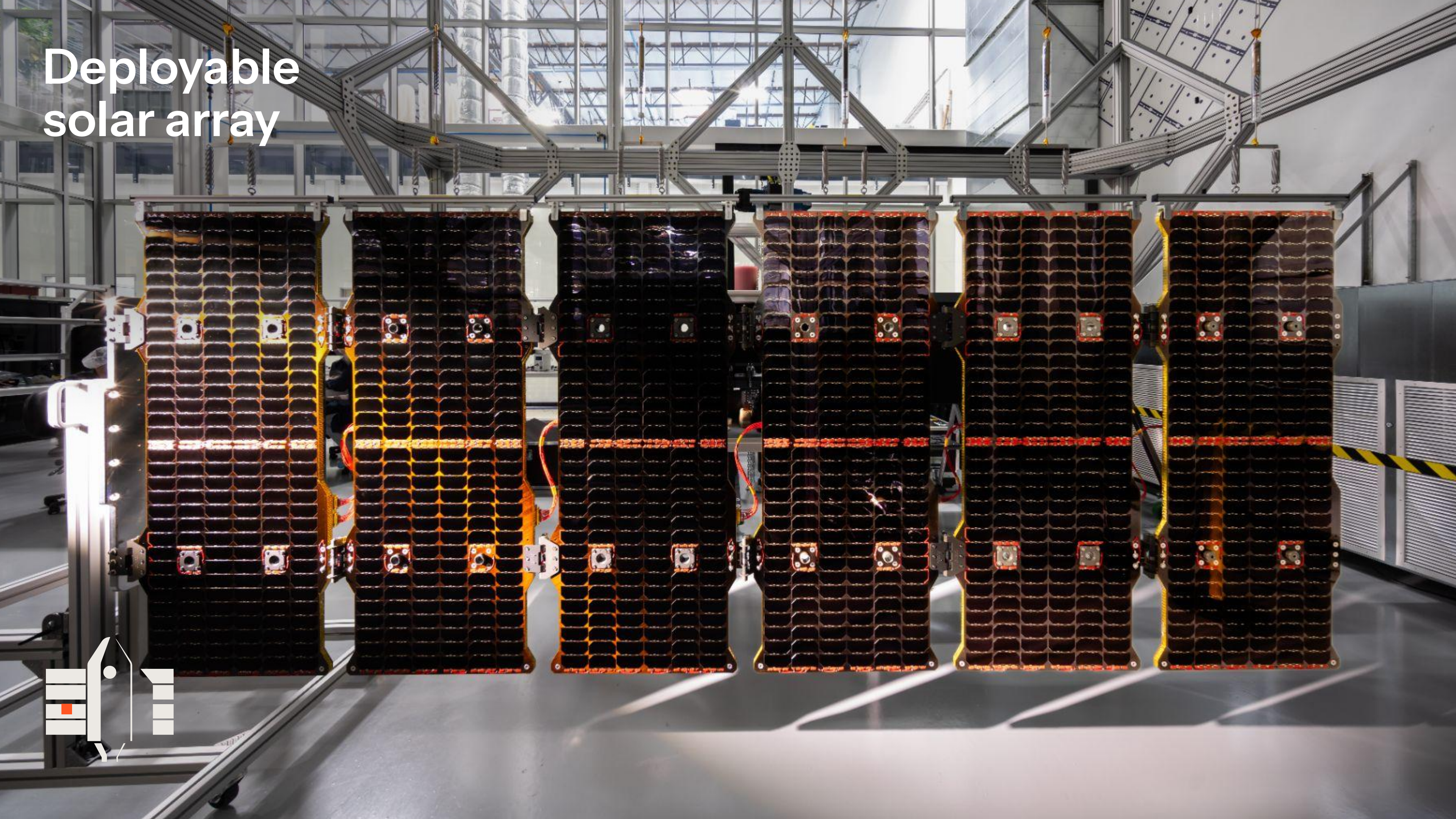
- Deliver and return products and samples to and from space via a SpaceX Dragon spacecraft



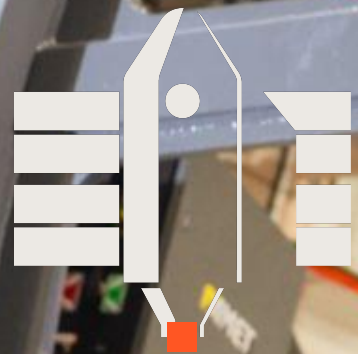
Hardware Components



Deployable solar array



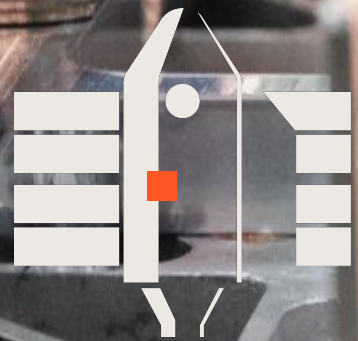
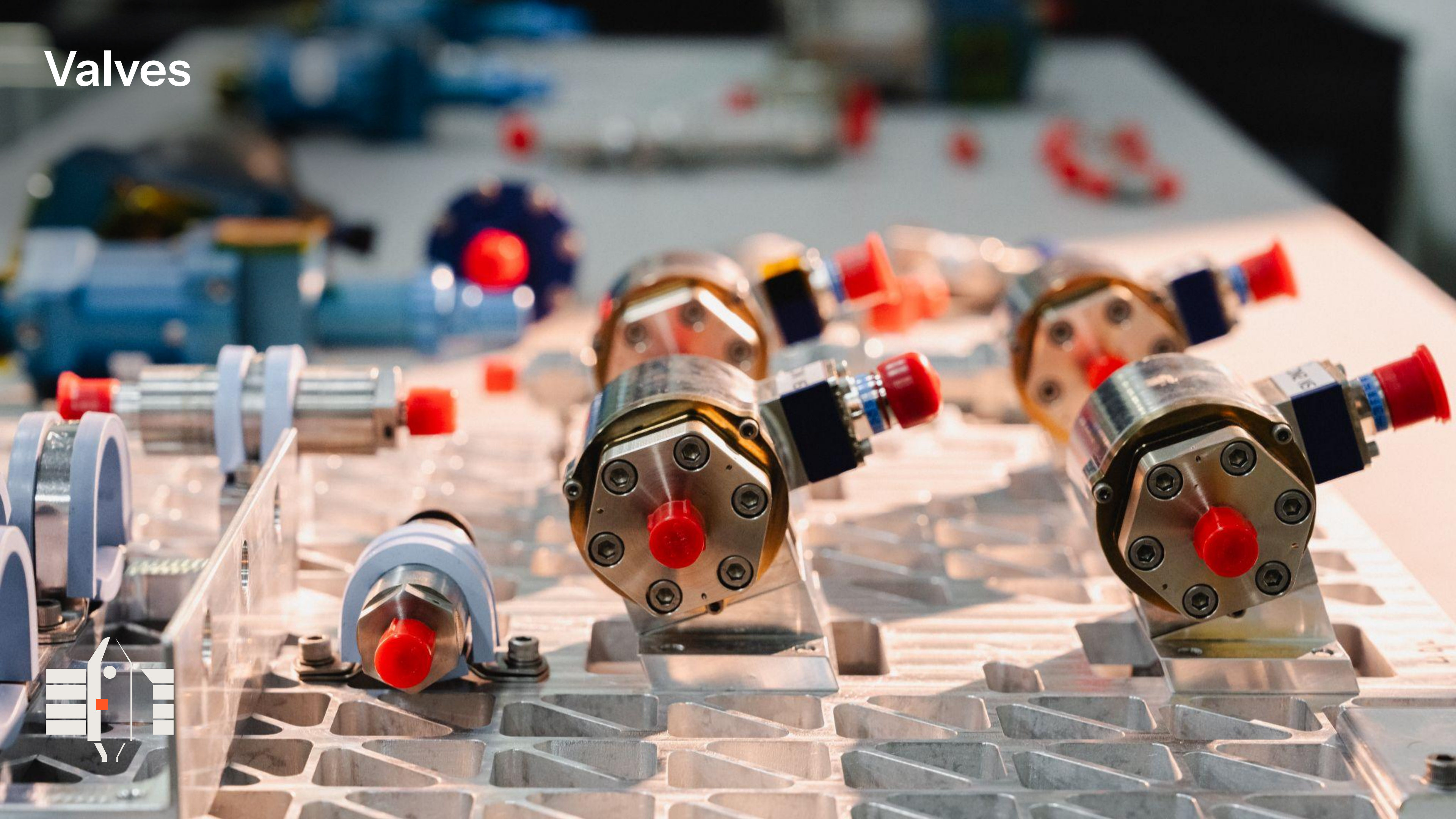
Hatch



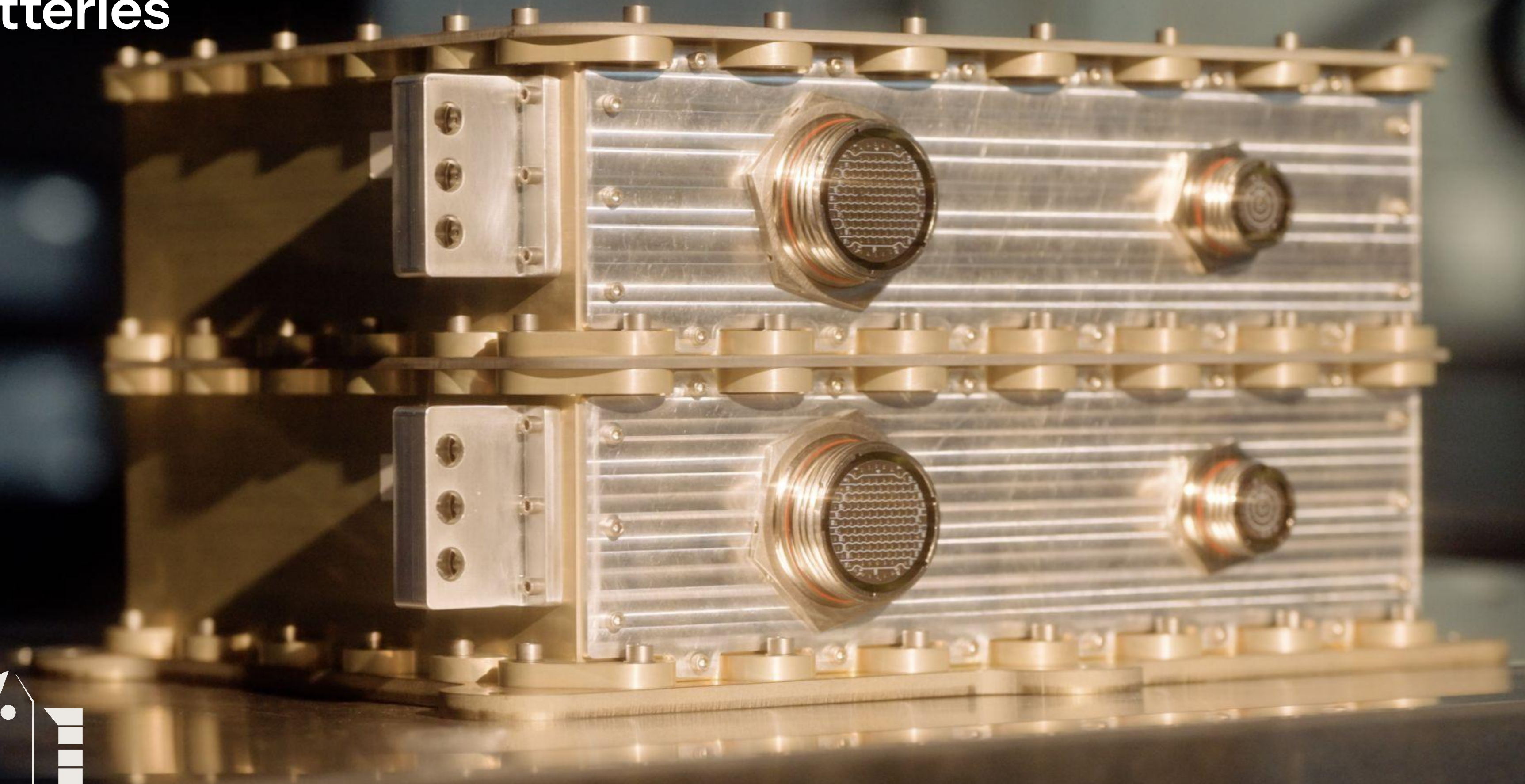
Control moment gyroscope (CMG)



Valves



Batteries



Missions to Haven-1



Types of Haven-1 Missions



Government Astronaut Missions
Comprehensive facilities for advanced customer requirements

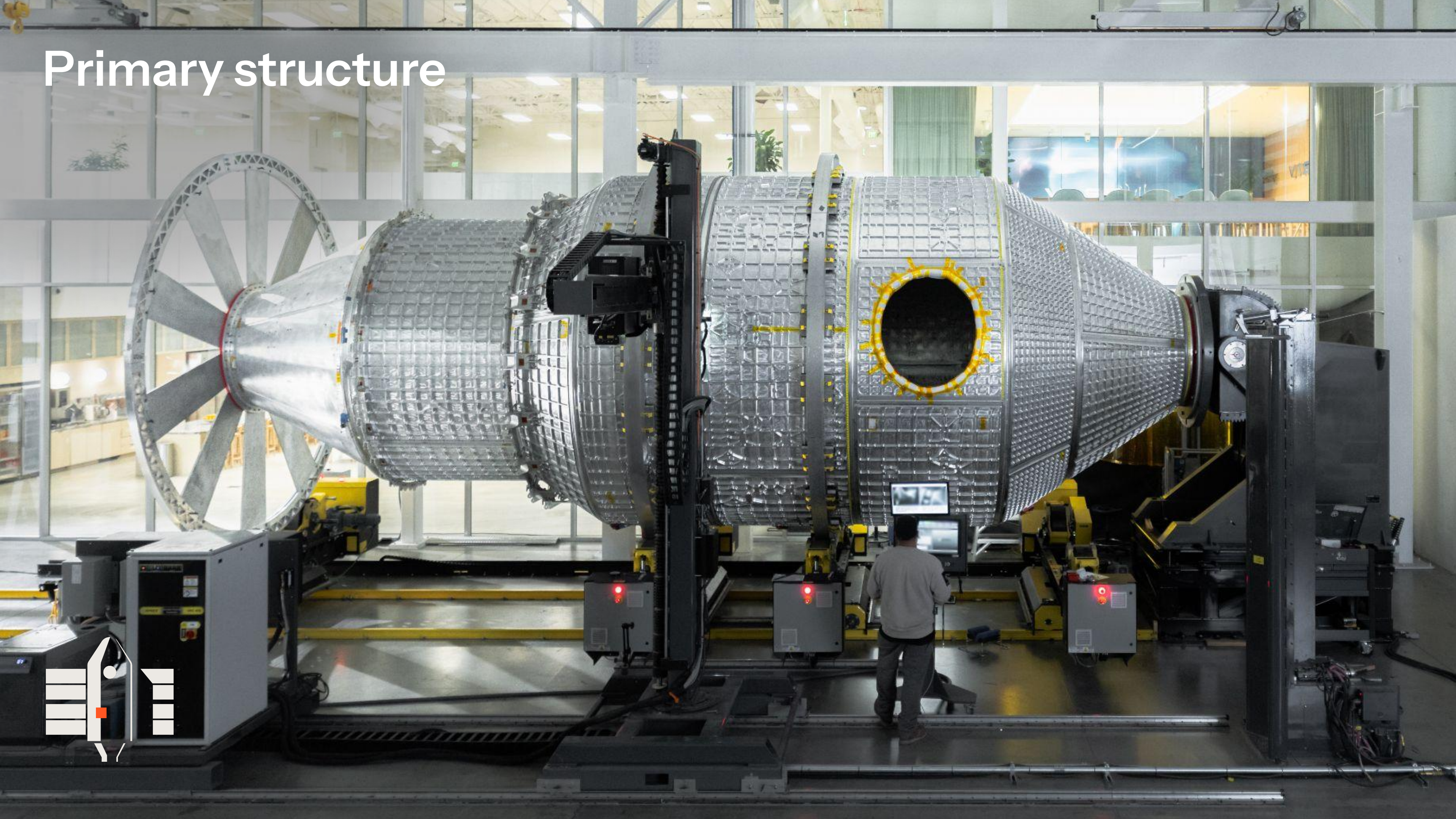


Private Astronaut Missions
Experience the most capable human-centric habitat

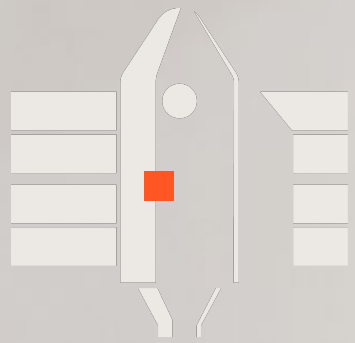
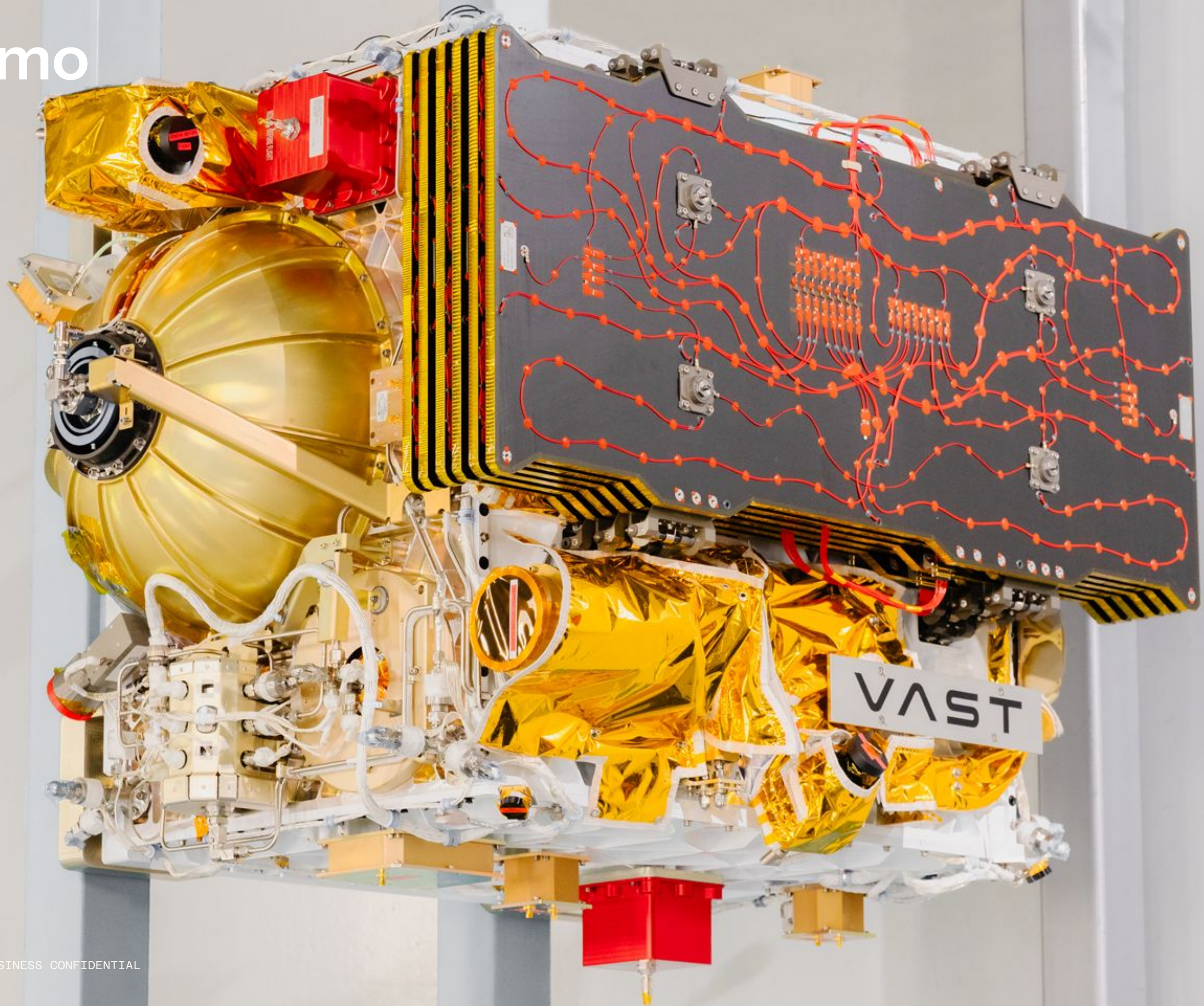


Payload Missions
Crewed and autonomous science, research, and manufacturing laboratory

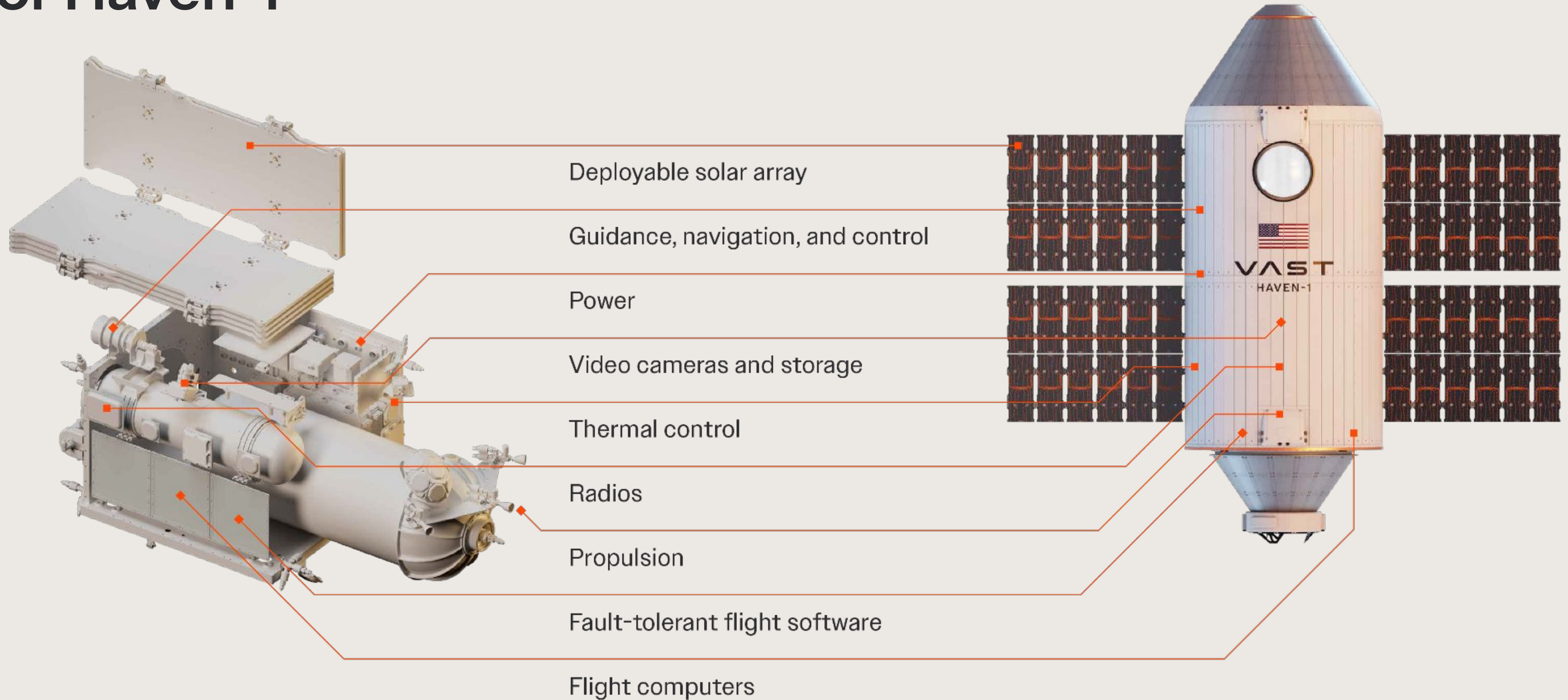
Primary structure



Haven Demo



Systems tested for Haven-1



Haven Demo

Specifications

Date/Time of Launch	November 2 1:09 AM EST
Orbital inclination	45°
Altitude	509 km
Mass	552.19 kg
Dimensions	.91 m x 1.21 m x .91 m
Power	1,100 w



Mission control team awaiting separation

November 1, 2025, 11:10 PM PST





Haven-2

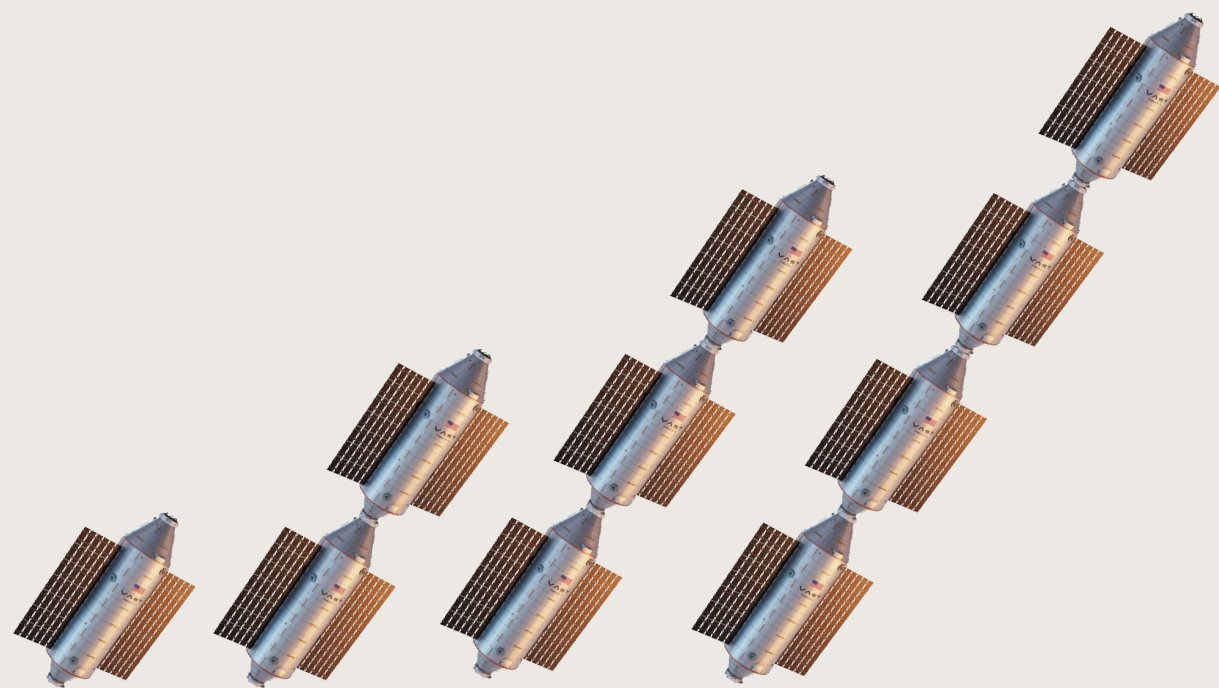
Designed to succeed the
International Space Station

- Designed for NASA certification
- First module operational in 2028, fully built in 2032
- Common module design increases build speed and reduces cost
- 9 modules, 611 m³ of habitable volume and 86 kW total power
- Designed for both government and commercial use
- Built on the heritage and technology of Haven-1



Timeline

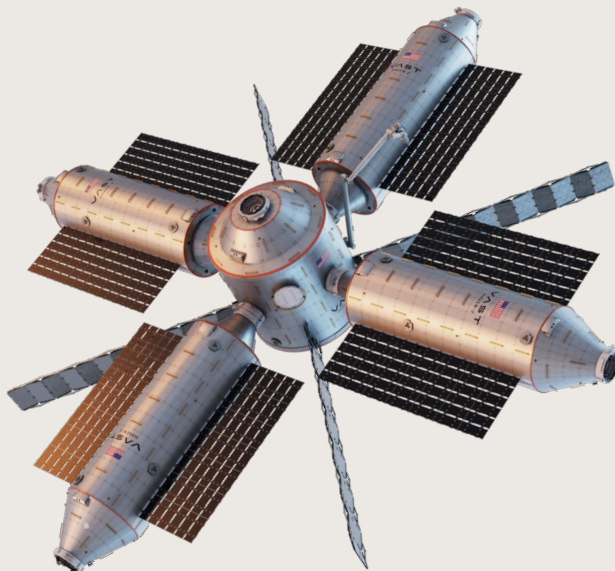
Starting in 2028, Haven Modules will launch approximately every six months, with a final station configuration slated for 2032.



2028

4 Module Build up

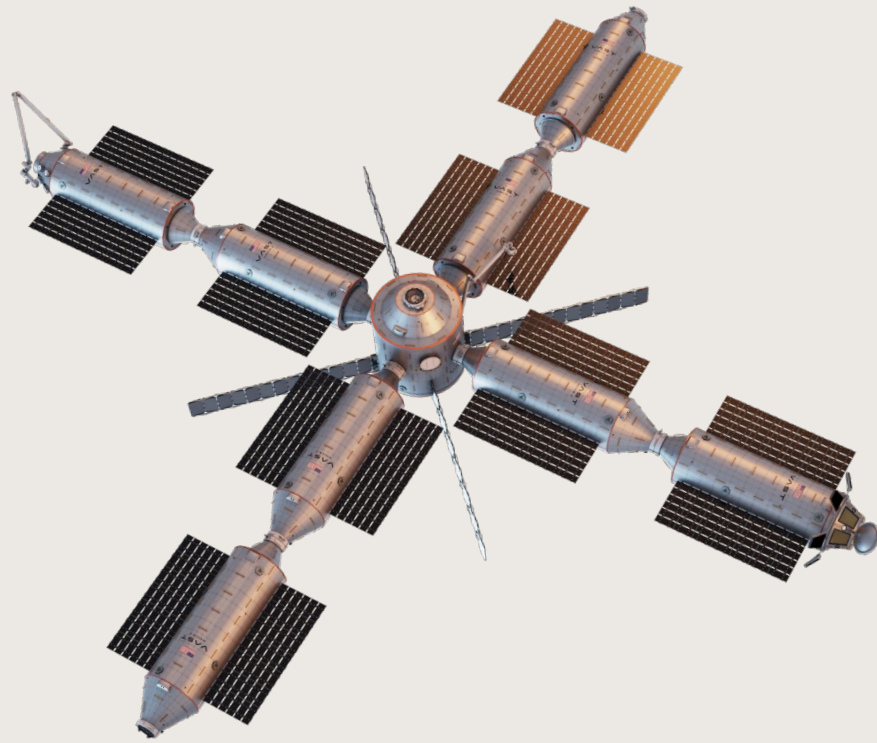
First Haven Modules launch, connecting to form a sequential station by 2030



2030

4 Modules + Core

The original 4 Haven Modules reconnect to a Haven Core, forming a robust cross-configured station in 2030



2032

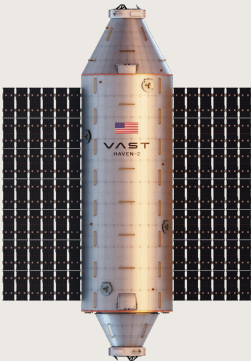
8 Modules + Core

4 more Haven Modules connect, forming a comprehensive 1-core, 8-module cross-configuration station by 2032

Haven-1 Comparison



Haven-1



Haven-2 Module

PRIMARY STRUCTURE	4.4m external, 3.8m internal	4.4m external, 3.8m internal. Same tooling, material, welding, and overall design approach
IDA DOCKING PORTS	1	2 - mirroring the design on Haven-1. Provided by SpaceX. One active and one passive. (2x)
LENGTH	10.1 m	16 m (1.4x)
LIFE SUPPORT	Open loop with 160 crew days pre-packaged	Open loop with 720 crew days pre-packaged and cargo resupply capability
LAUNCH VEHICLE	SpaceX Falcon 9 reusable	SpaceX Falcon Heavy w/ expendable core and stretched fairing
MASS	14,600 kg	29,000 kg (2x)
TOTAL PRESSURIZED VOLUME	80 m ³	127 m ³ (1.6x)
HABITABLE VOLUME	45 m ³	55 m ³ (1.2x)
TOTAL POWER	5.5 kW	9.8 kW (1.8x)
PAYLOAD POWER	1 kW	2 kW (2x)

Facilities



HQ, Design, Manufacturing, Integration, Training Long Beach, CA



Manufacturing Hawthorne, CA



Government Affairs Washington, DC



Environmental Testing Mojave, CA

Our Team



900+

Total team members

483

Years combined human spaceflight expertise

2564

Years combined spaceflight expertise



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