



2023

SIERRATM
SPACE

Dream Chaser Mission to ISS

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Company Background



SIERRA
SPACE





Three Disruptive Commercial Product Lines

One innovative business platform in space



SPACE TRANSPORTATION

- Simplify transportation to and from space
- Target lowest cost cargo and crew in market segment



SPACE DESTINATIONS

- Emerge as the largest real estate developer in space
- Provide infrastructure and services



SPACE APPLICATIONS

- Next generation of differentiated technologies and services
- High-valued earth observation and on-orbit servicing constellations





World Leading Technology and Systems

DREAM CHASER®

Advanced carbon composite highly reusable spaceplane

LIFE™ MODULE (LARGE INTEGRATED FLEXIBLE ENVIRONMENT)

Expands to over 300 m³ pressurized volume on-orbit

SHOOTING STAR®

Modular and versatile space vehicle

VORTEX®-COOLED LIQUID ROCKET ENGINE TECHNOLOGY

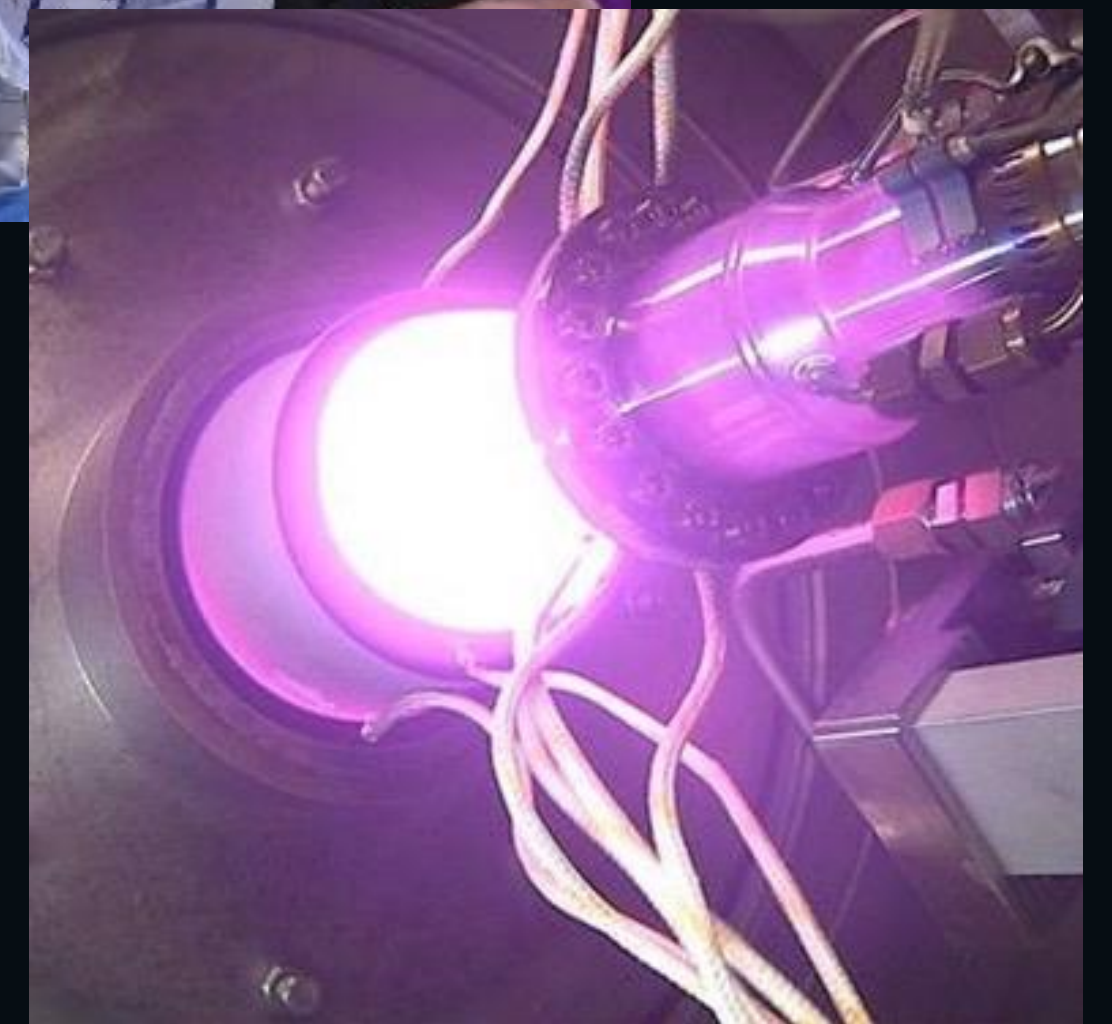
High combustion efficiency, low manufacturing costs

POWER GENERATION

Surface mount solar cell technology offers up to ~40% more power per unit area at significantly lower cost

POINTING AND MOTION CONTROL

Motion solutions that provide high precision pointing for applications such as imaging and laser communications





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Mission Overview



NASA Commercial Resupply Services 2 (CRS-2)



NASA resupply missions for the International Space Station begin in 2023

Dream Chaser to provide a minimum of seven cargo service missions to and from the ISS

Can provide up to 5,500 kg of pressurized and unpressurized cargo to the space station

Can return critical cargo at less than 1.5 g's using a runway landing





Vehicle Overview



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Dream Chaser

The only commercial runway capable spaceplane

15+

**Missions –
Highly Reusable**

6+

**Tons Cargo
Capacity**

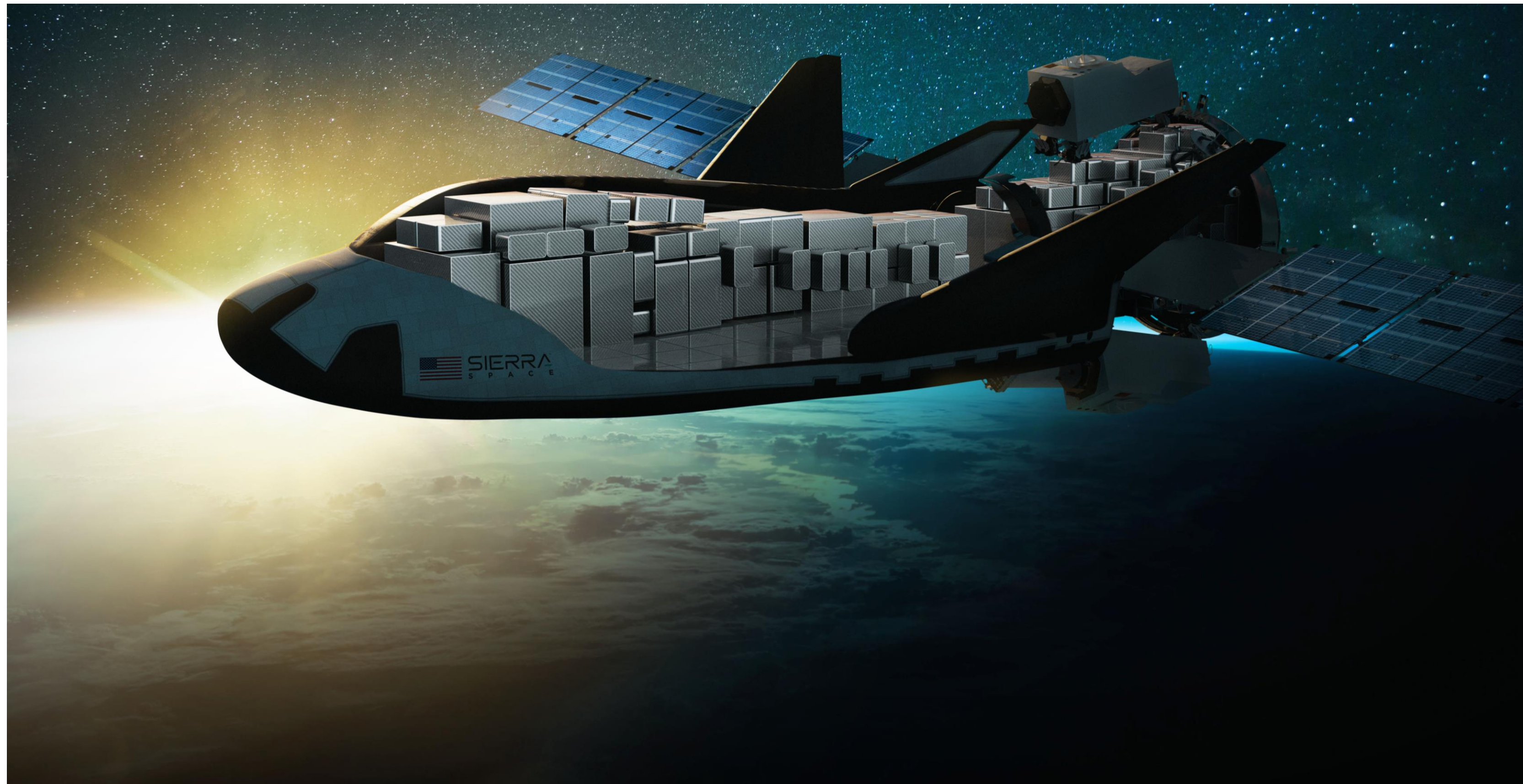
1.5

**Gs Force
Upon Re-Entry**

0

**Toxic
Fuels**

Compatible with a wide array of current and future launch vehicles
Designed for high reusability and quick turnarounds between missions



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SPACE
DREAMS WORTH CHASING™