

**What awaits us
in the space industry
in the near future?**

Plan

- 1. The insane idea of Elon Musk**
- 2. Breakthrough Starshot**

Why Mars?





Sun



Mercury



Venus



Earth



Mars



Jupiter



Saturn



Uranus



Neptune



Pluto

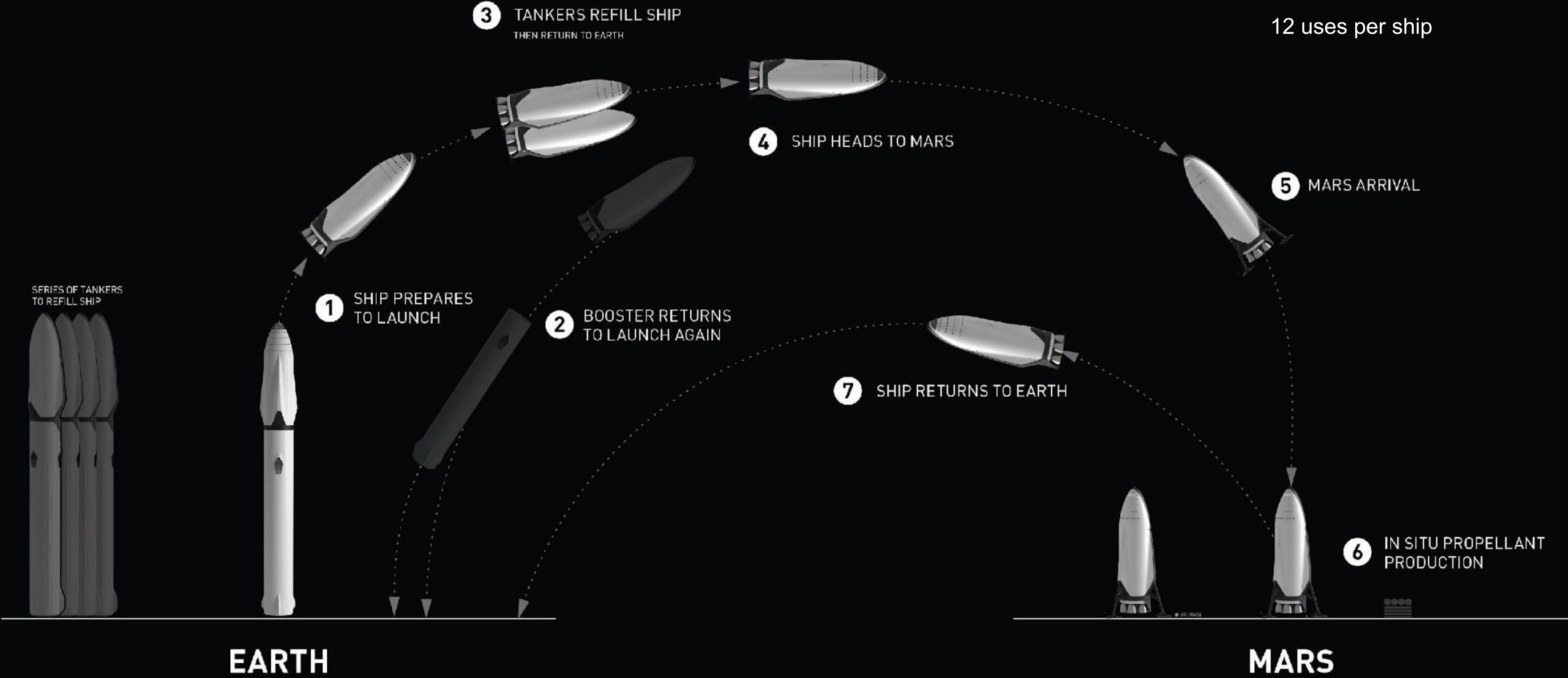


Eris

	EARTH	MARS
DIAMETER	12,756 km / 7,926 mi	6,792 km / 4,220 mi
AVERAGE DISTANCE FROM SUN	150,000,000 km / 93,000,000 mi	229,000,000 km / 142,000,000 mi
TEMPERATURE RANGE	-88C TO 58C / -126F TO 138F	-140C TO 30C / -285F TO 88F
ATMOSPHERIC COMPOSITION	78% N ₂ , 21% O ₂ , 1% OTHER	96% CO ₂ , <2% Ar, <2% N ₂ , <1% Other
FORCE OF GRAVITY (WEIGHT)	100 LBS ON EARTH	38 lbs ON MARS (62.5% LESS GRAVITY)
DAY LENGTH	24 hrs	24 hrs 40 min
LAND MASS	148.9 MILLION km ²	144.8 MILLION km ² (97% OF EARTH)
PEOPLE	7 BILLION	0

SYSTEM ARCHITECTURE

TARGETED REUSE PER
VEHICLE
1,000 uses per
booster 100 per
tanker
12 uses per ship





122 m

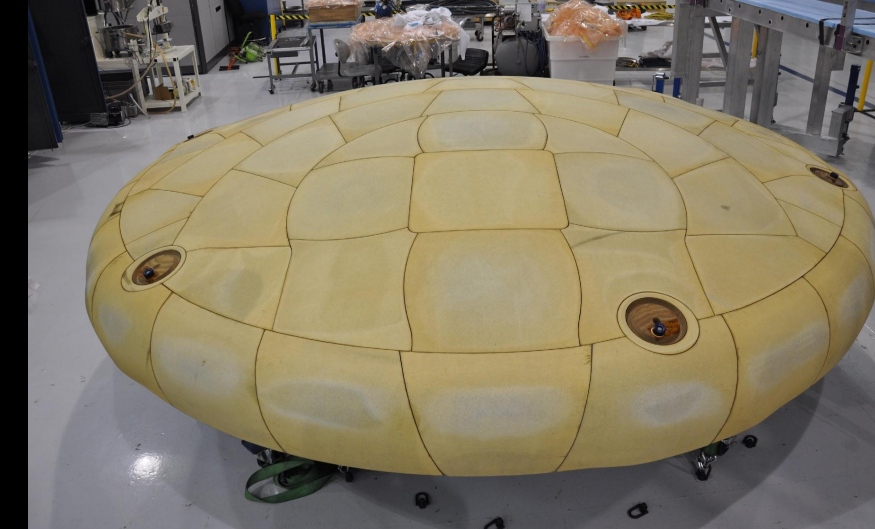
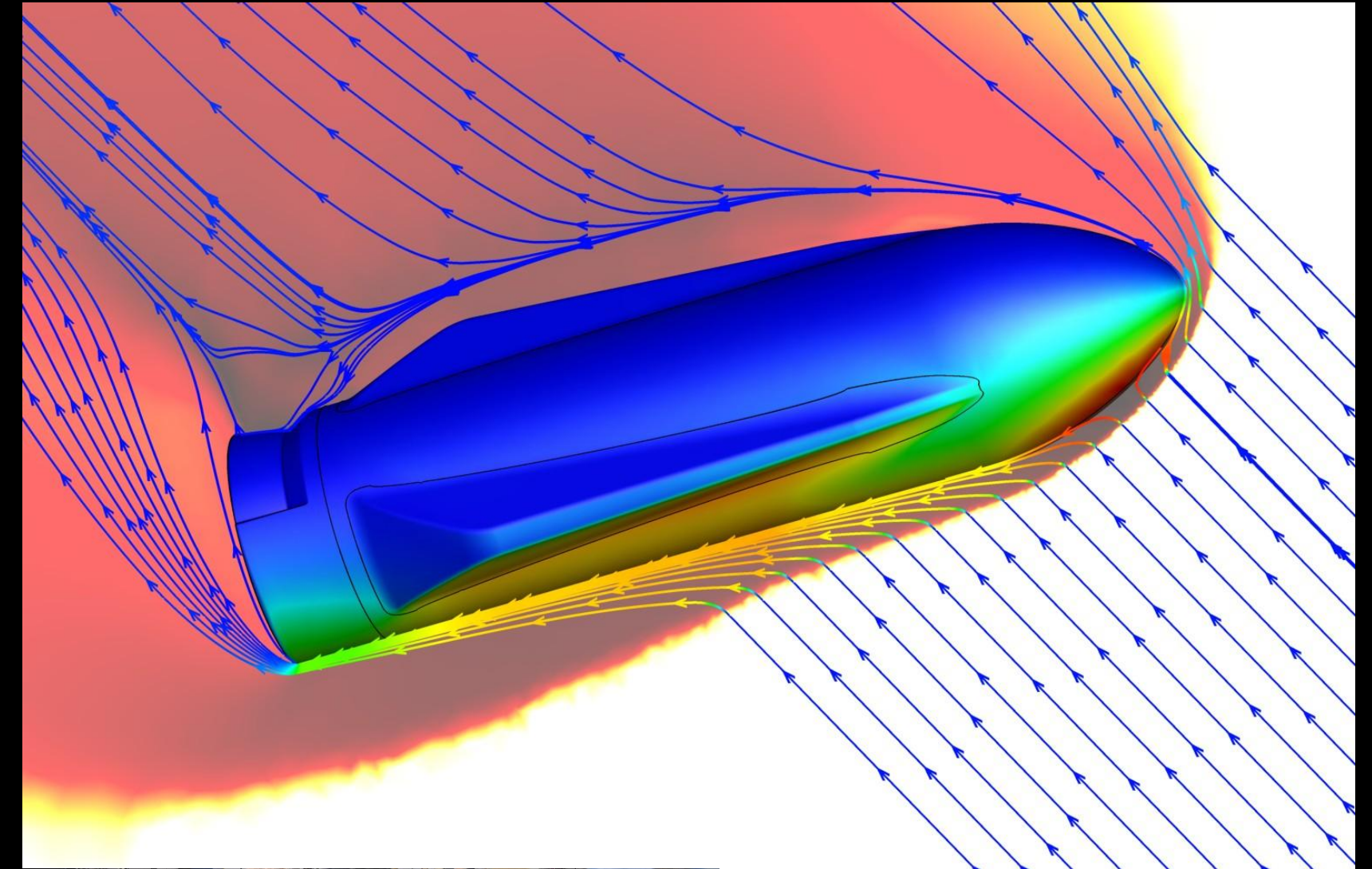
	<div>C₁₂H_{22.4}O₂</div> <div>KEROSENE</div>	<div>H₂/O₂</div> <div>HYDROGEN/OXYGEN</div>	<div>CH₄/O₂</div> <div>DEEP-CRYO METHALOX</div>
VEHICLE SIZE	●	●	●
COST OF PROP	●	●	●
REUSABILITY	●	●	●
MARS PROPELLANT PRODUCTION	✖	●	●
PROPELLANT TRANSFER	●	●	●

-
- GOO
- D OK
- ✖ BAD
- VERY BAD

ARRIVAL

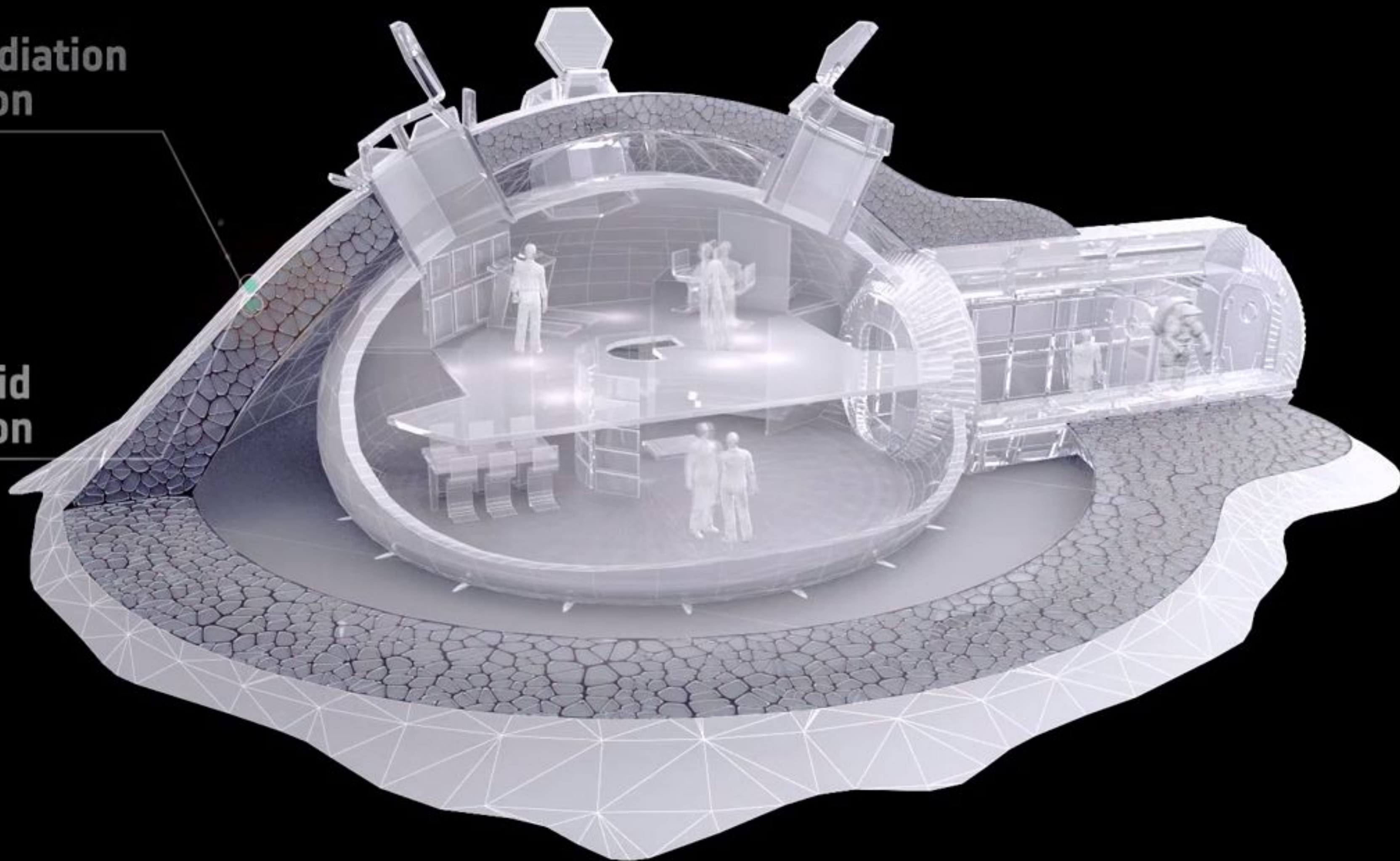
From interplanetary space, the ship enters the atmosphere, either capturing into orbit or proceeding directly to landing

Aerodynamic forces provide the majority of the deceleration, then 3 center Raptor engines perform the final landing burn



**Solar Radiation
Protection**

**Meteoroid
Protection**





ЗЕМЛЯ



МАРС

Твоя часть презентации

Thank you for attention!

