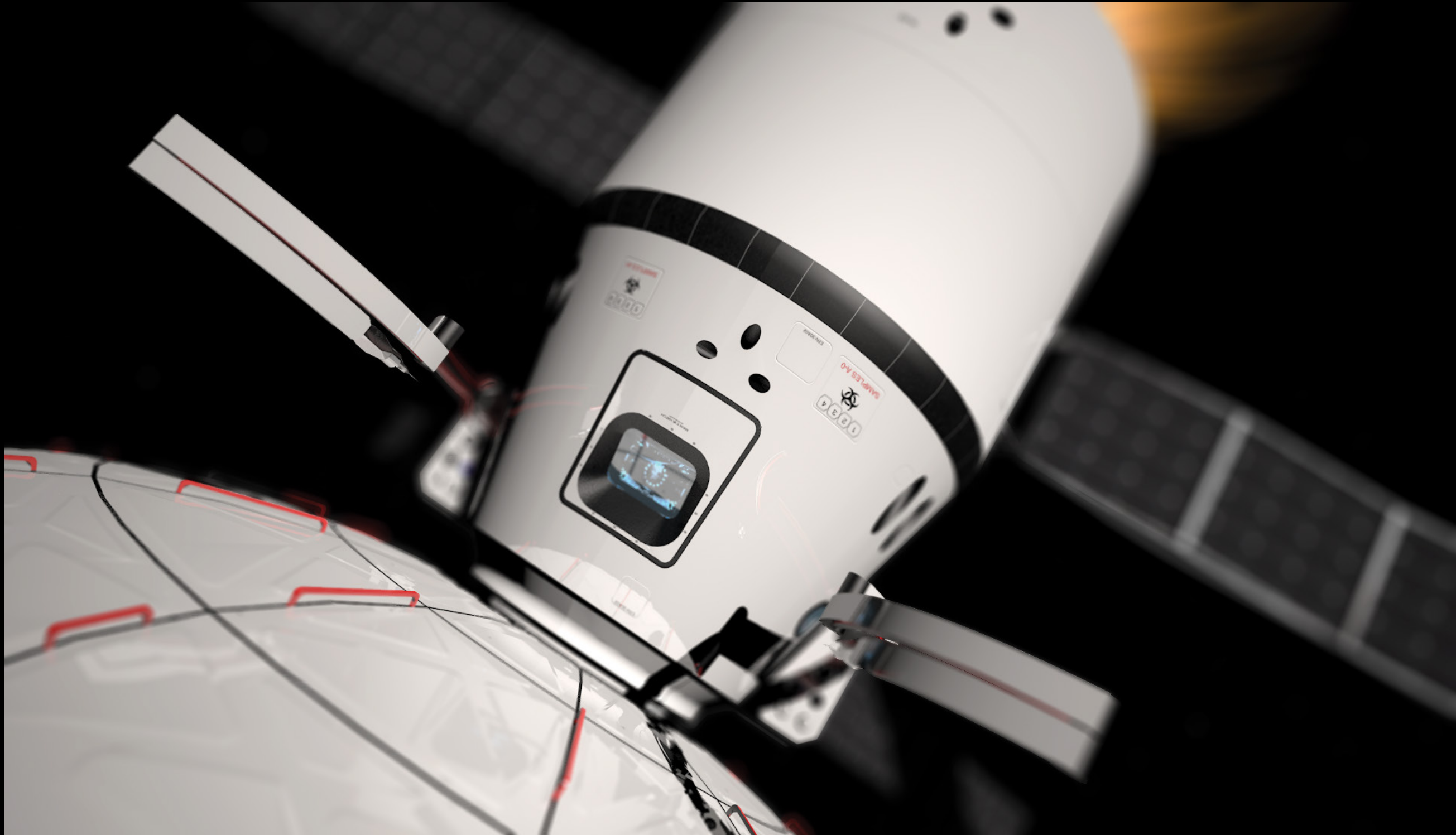


# MISSION TO PHOBOS AND DEIMOS<sup>v.2</sup>

MANNED EXPLORATION OF THE MOONS OF MARS

MISSION ARCHITECTURE:

- FIRST STEP / PRECURSOR MISSION BEFORE GOING TO THE SURFACE OF MARS
- EXPLORE PHOBOS AND DEIMOS ORIGIN
- 1 MONTH, SHORT STAY MISSION (TOTAL 541 DAYS TRAVEL)
- PHOBOS MAY BE PEPPERED WITH MATERIAL FROM MARS ITSELF
- FASTER: LESS TECHNOLOGY DEVELOPMENT REQUIRED
- BETTER: SIMPLICITY / NO LANDINGS ONLY ORBITAL MANEUVERS
- SAFER: MICRO-GRAVITY ONLY
- WORKS AS RADIATION PROTECTION FOR THE CREW AND EQUIPMENT DURING THE SURFACE EXPLORATION
- CHEAPER: THAN ANY MARS MISSION
- ONLY 2 HEAVY LIFT LAUNCHES (SLS OR FXH) AND 1 MEDIUM LIFT WOULD BE REQUIRED TO COMPLETE THE MISSION
- DESIGNED FOR 3 ASTRONAUTS
- SAMPLE COLLECTION AND DELIVERY TO EARTH
- TOTAL SPACESHIP MASS IN GTO ORBIT WOULD BE LESS THAN 150 MT
- LOWEST DELTA-V DEPARTURE DATE FOR THE FIRST LAUNCH IS ON 9/19/2021
- TOTAL MISSION DURATION: 541 DAYS
- RETURN TO EARTH ON 3/14/2023]



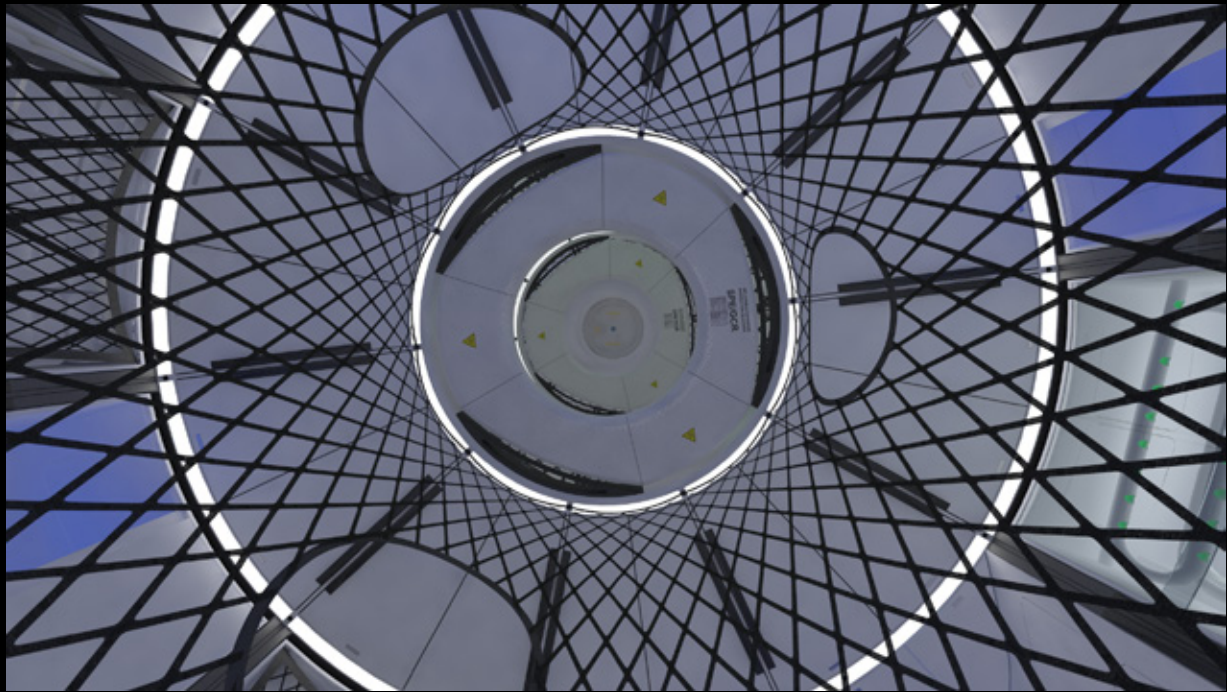
PHOBOS EXPLORATION VEHICLE DOCKED WITH HAB



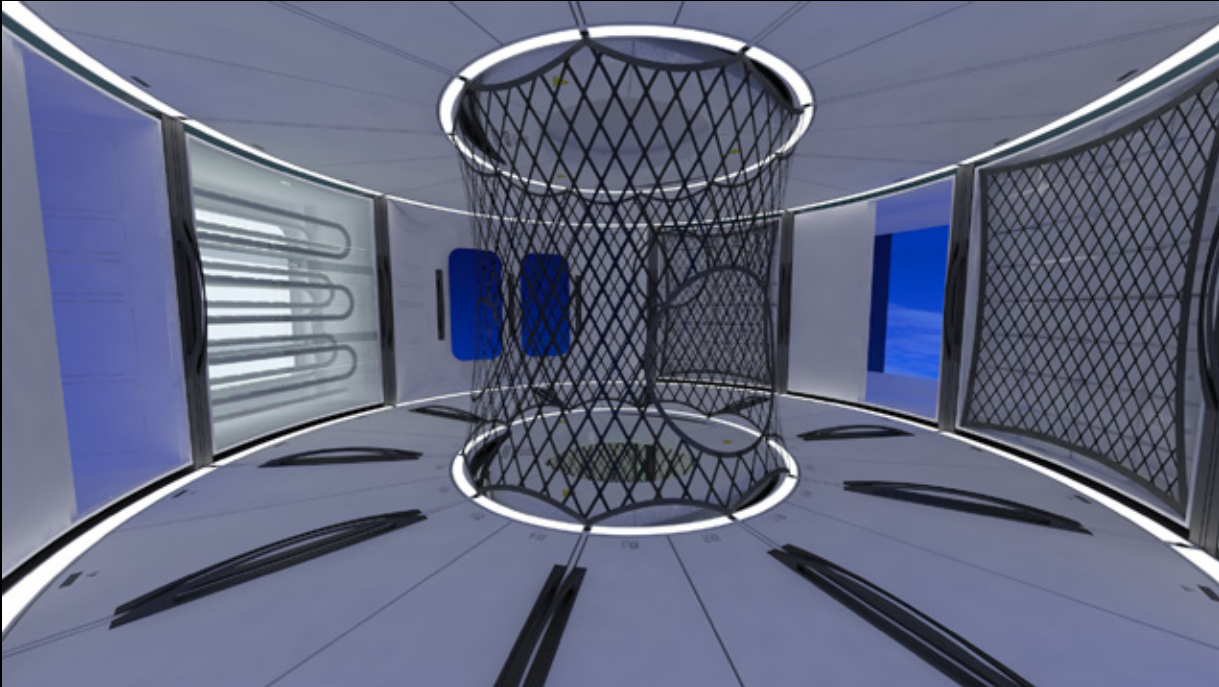
DAY 1 - FIRST MODULE DELIVERY TO GTO



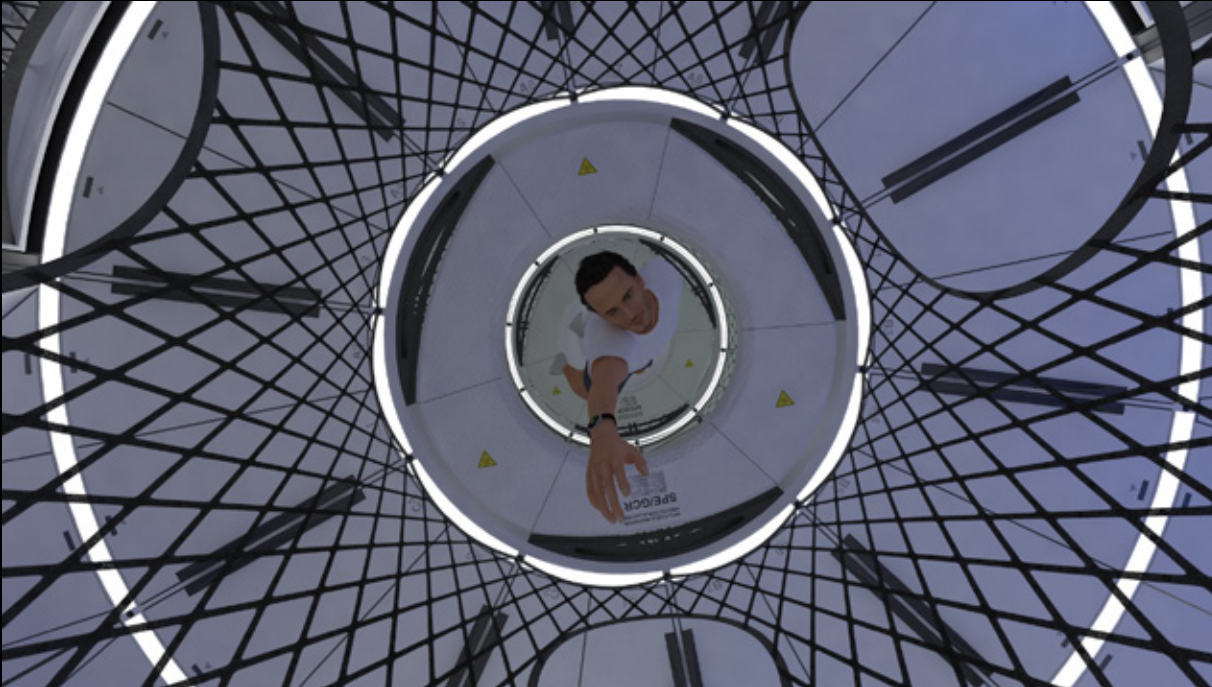
DAY 32 - SPACESHIP WITH DOCKED PEV/CREW



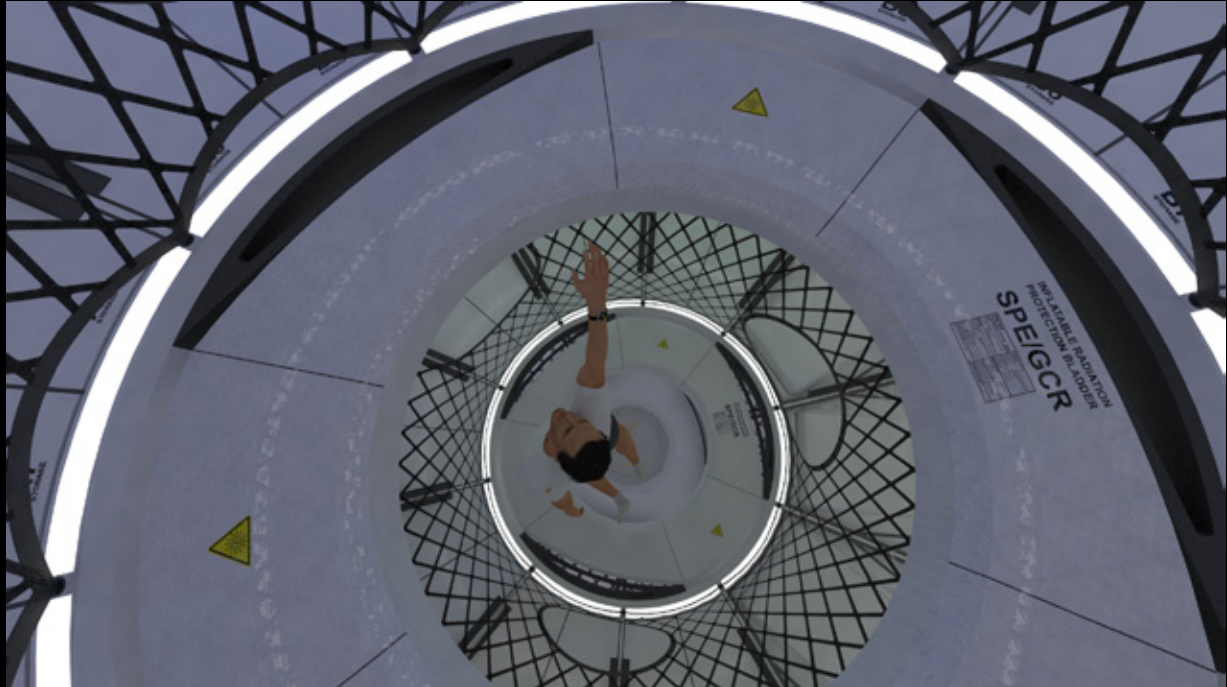
DAY 328 - PROPULSIVE BRAKING TO MARS ORBIT



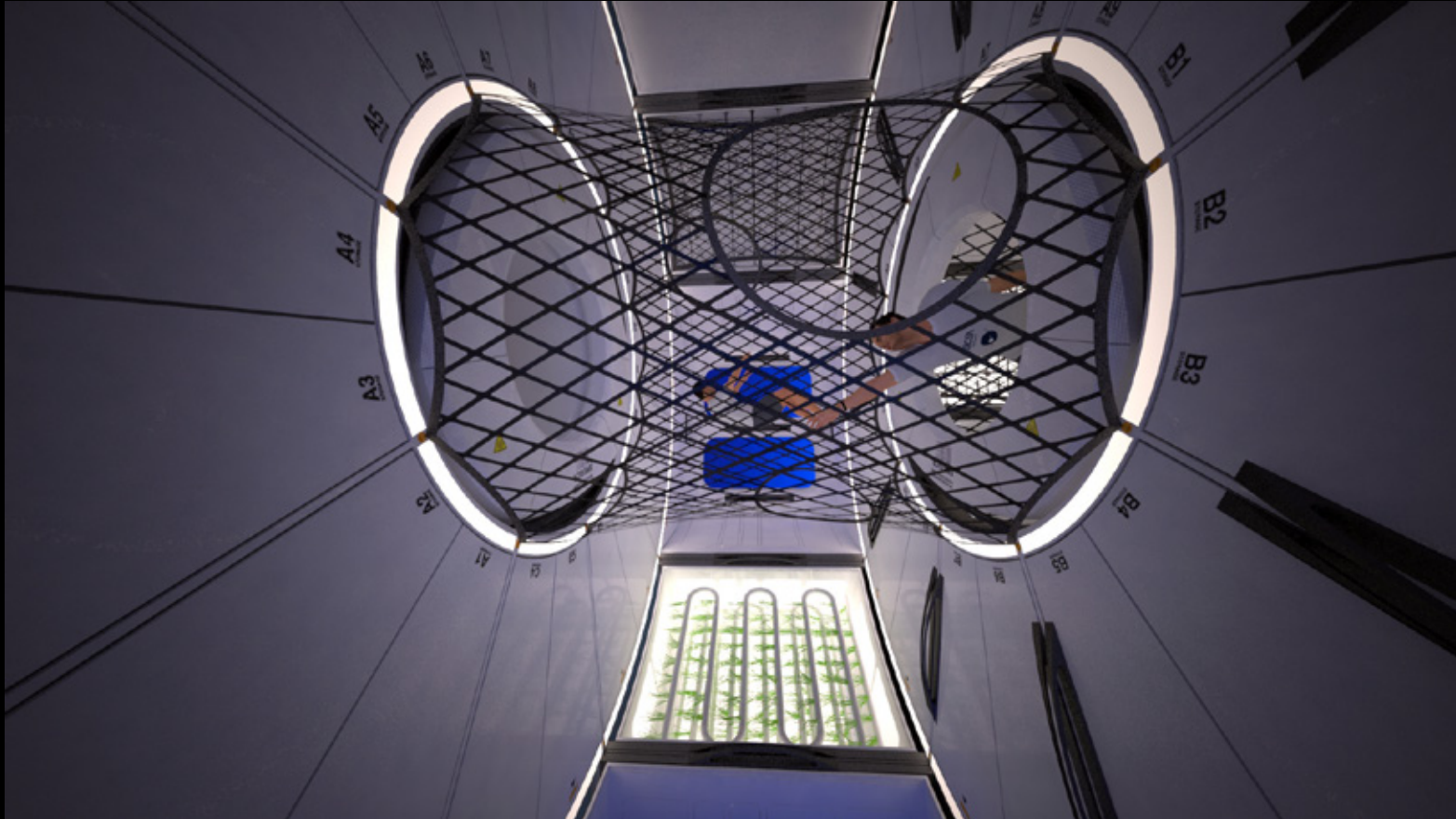
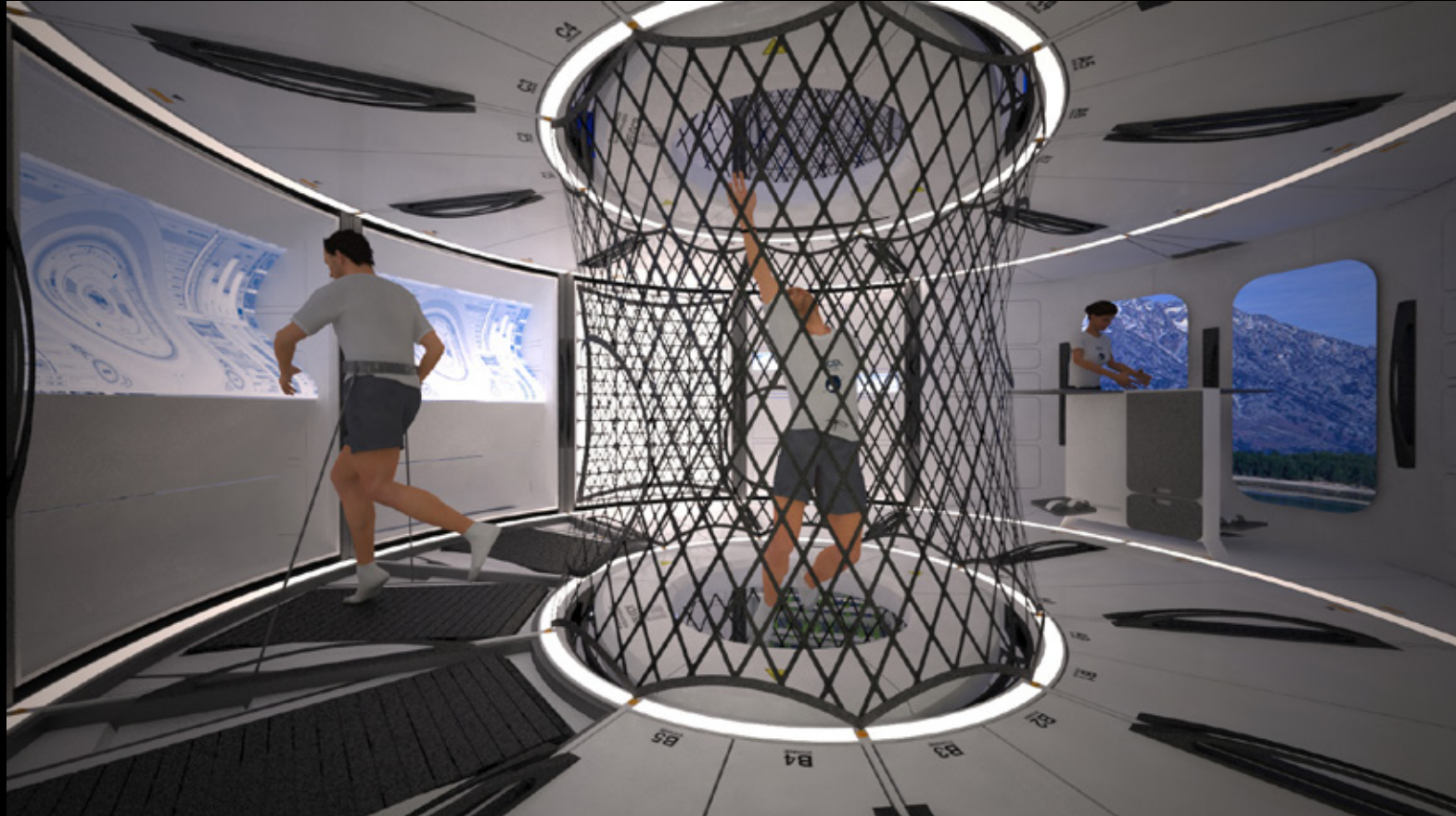
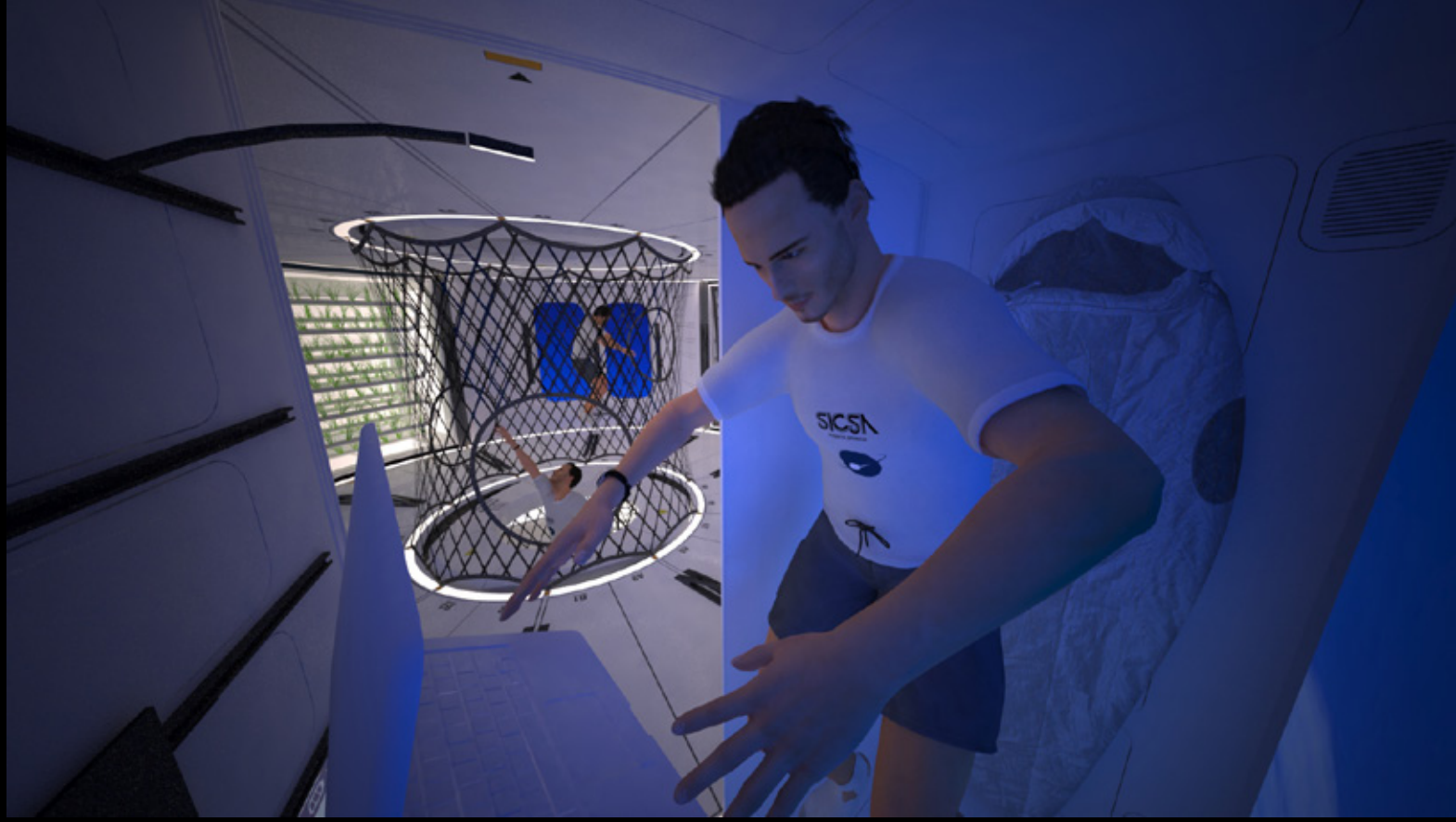
DAY 335 - PEV DEPARTS TO PHOBOS



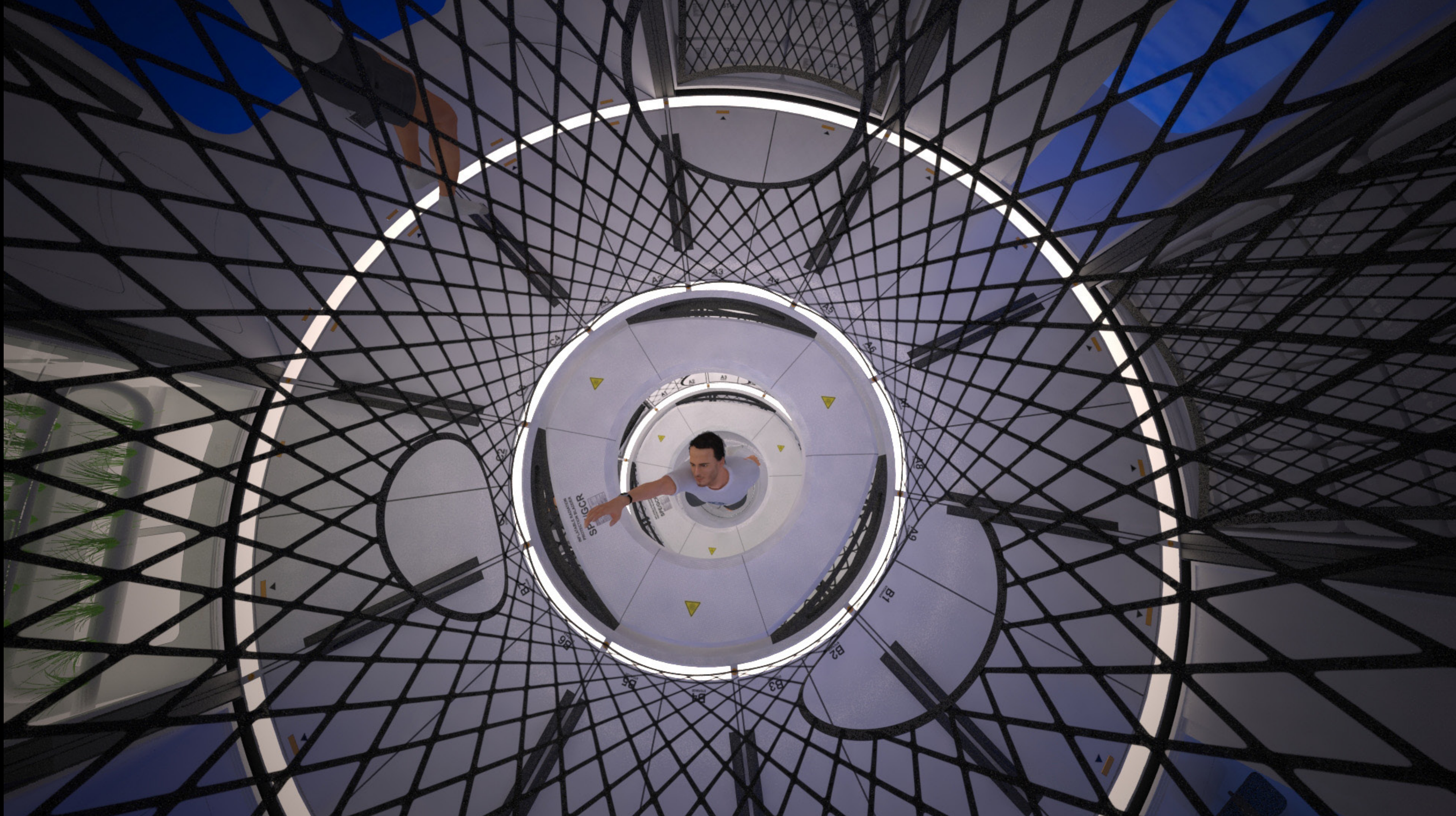
DAY 337 - PHOBOS SAMPLE COLLECTION



DAY 541 - PEV/ERV RETURN BACK TO EARTH



SPACE TRANSIT HAB INTERIOR RENDERINGS DISPLAYING CREW QUARTERS, C&C, TREADMILLS, GALLEY AND ROTATED VIEW PERSPECTIVE



CENTRAL CIRCULATION CORRIDOR WITH STORED INFLATABLE RADIATION PROTECTION BLADDER IN THE CENTER