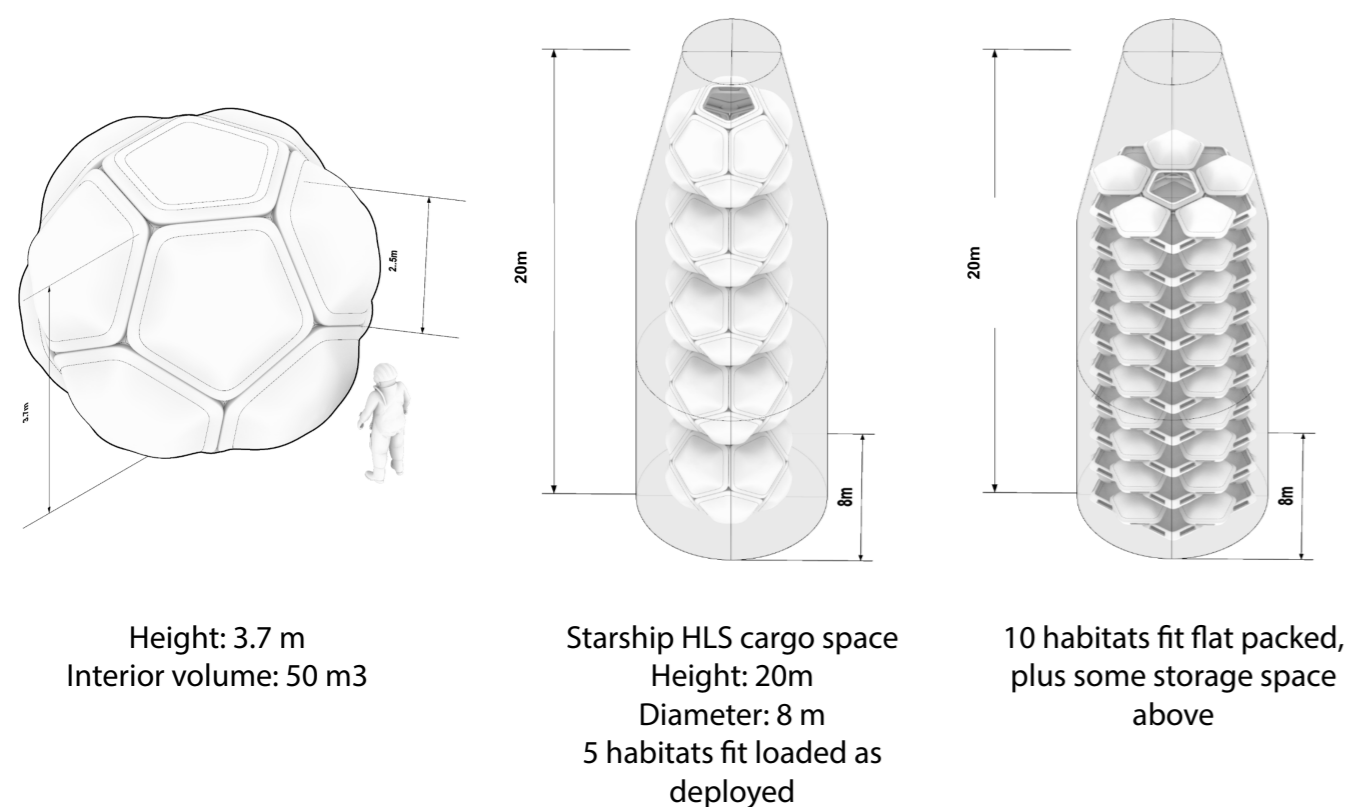
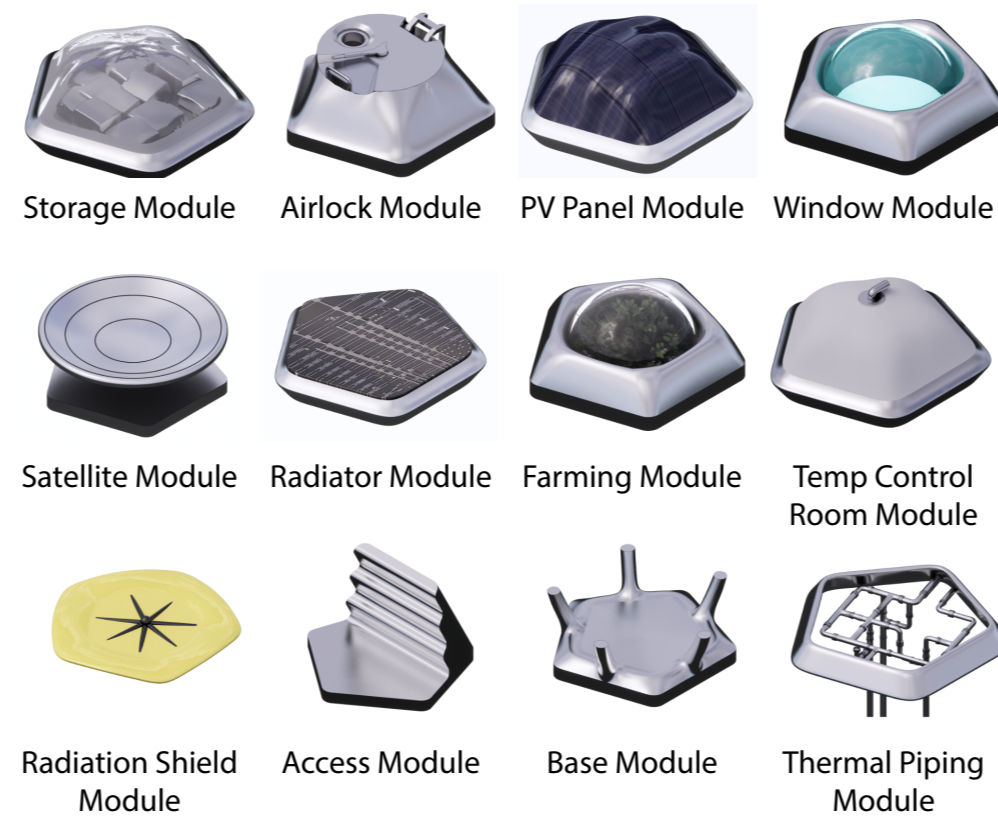


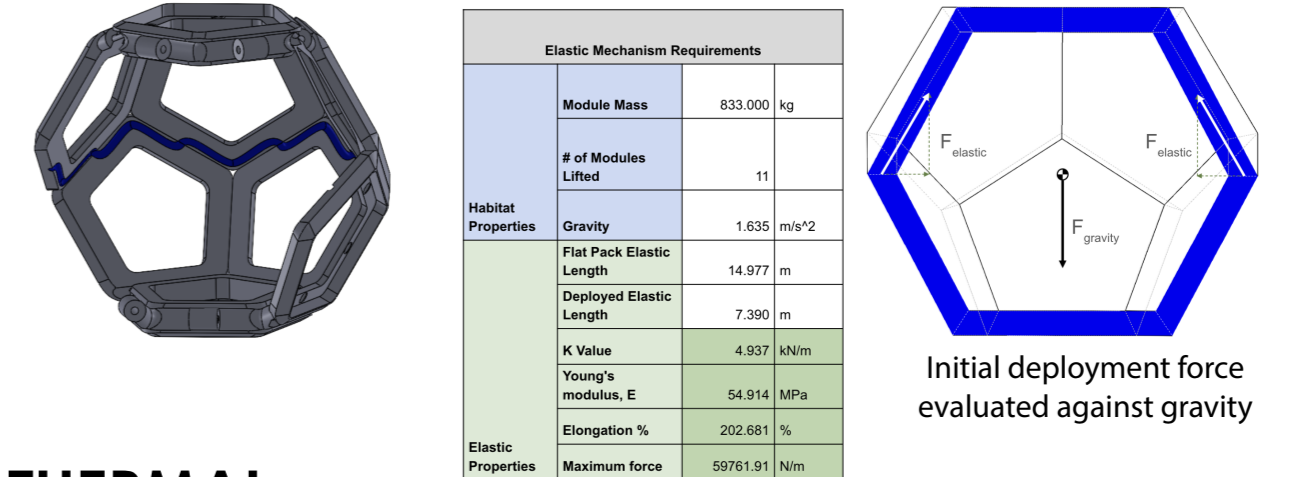
TRANSPORTATION



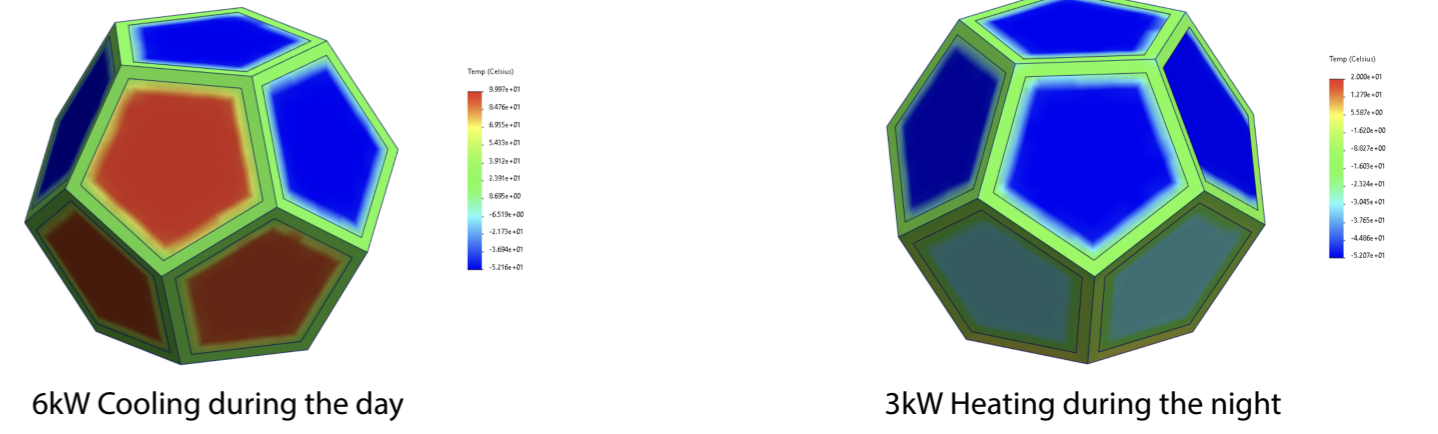
MODULES



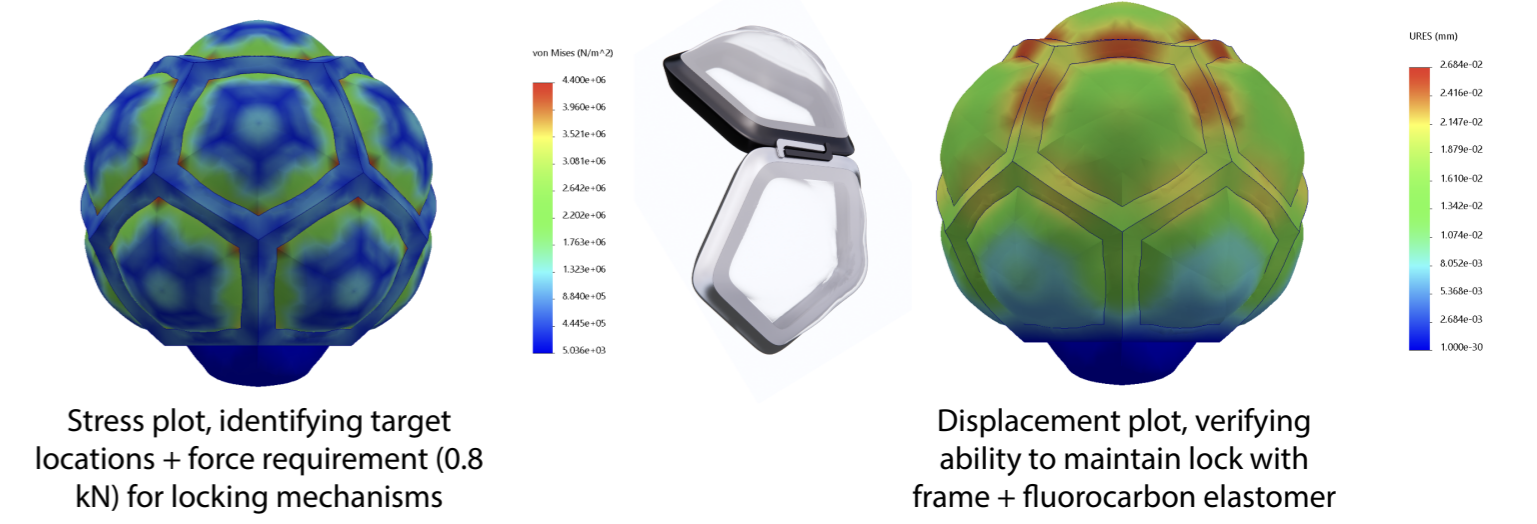
DEPLOYMENT



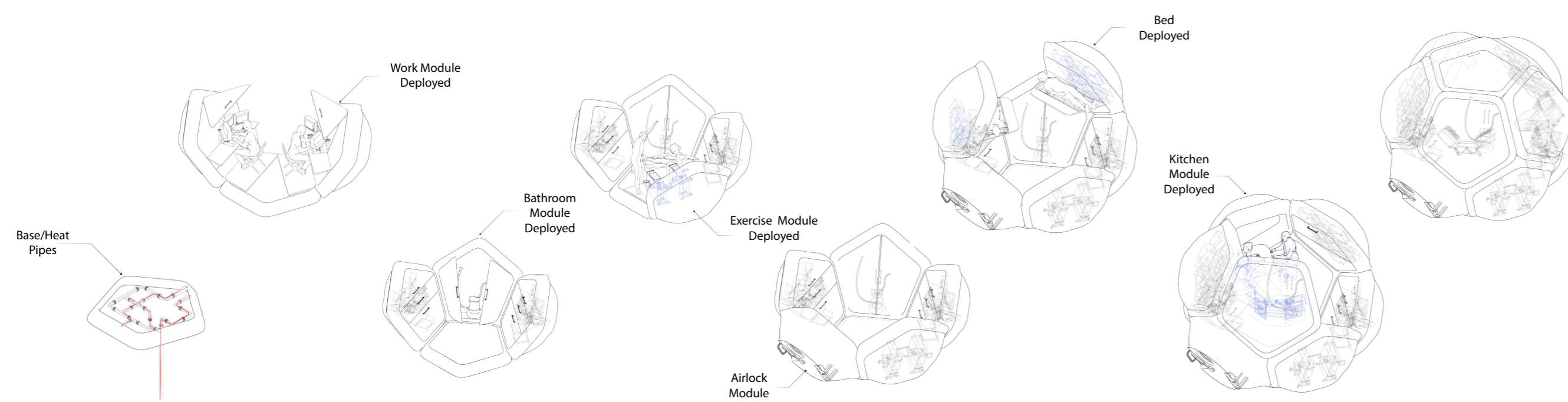
THERMAL



LOCKING

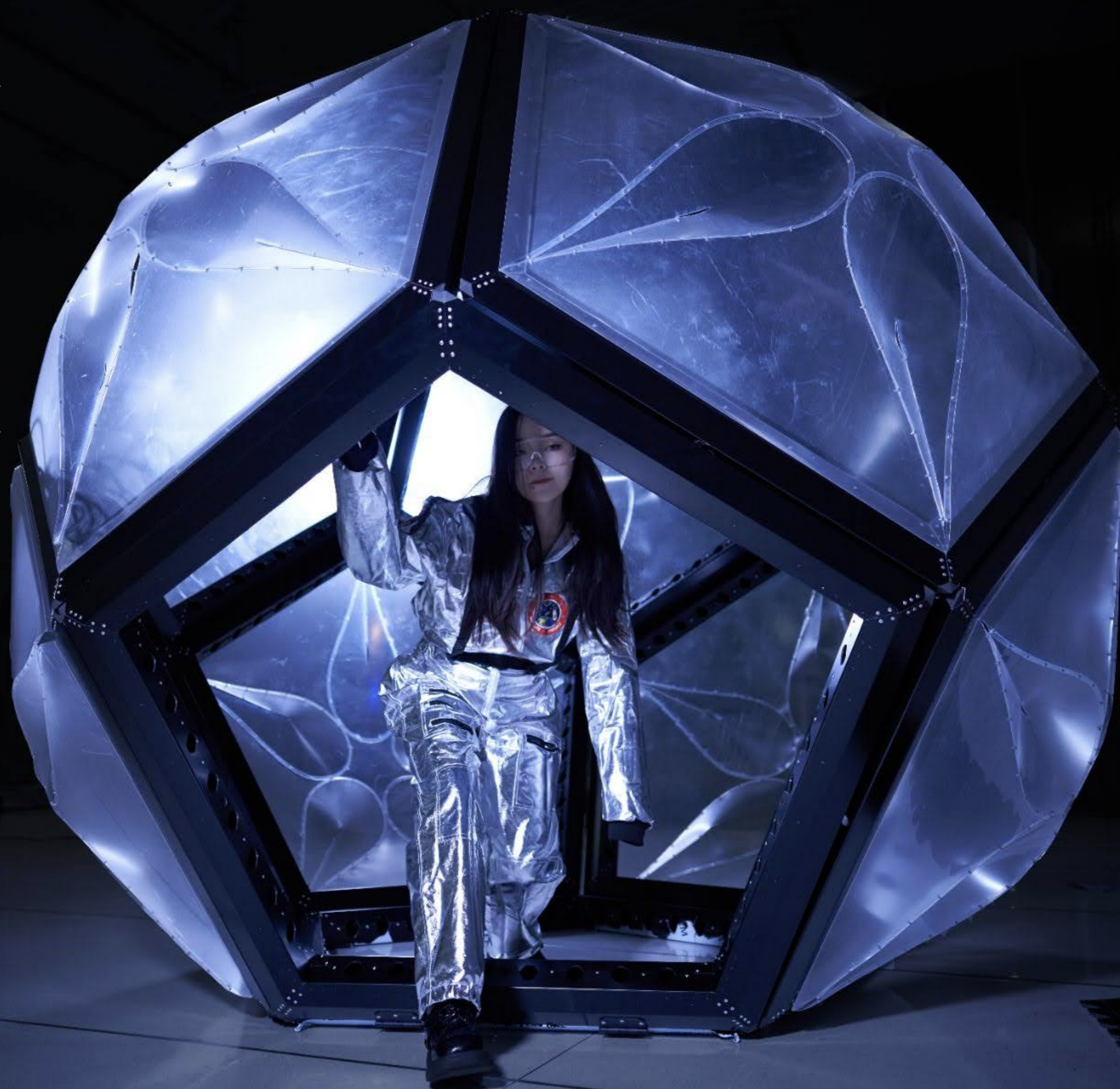


OPERATION



Momo, a collaborative project by MIT's Department of Architecture, AeroAstro, and the MIT Media Lab, aims to create a self-assembling lunar habitat. The habitat's driving design objectives are twofold: first, to maximize the efficiency of flat-packing the habitats into Starship HLS cargo space, and second, to ensure modularity. Each module is constructed from an aluminum frame, and a high-density polyethylene connecting membrane has been explored to protect against radiation. These modules contain storage space and can be customized depending on their function—serving as an airlock, a window, a PV panel, a work desk, or an exercise module. Additionally, they are replaceable in case of a breach, allowing astronauts to swap a module instead of replacing the entire habitat.

The endeavor by MIT students, who gained insights from NASA's Marshall Space Flight Center, NASA's Johnson Space Center, private companies like SpaceX, and research institutions such as Brookhaven National Lab, underscores the comprehensive approach required to realize the Momo habitat. As the project progresses through key milestones, from initial requirements to full operational readiness, it will continue to incorporate advanced technologies and rigorous testing to mitigate risks and ensure mission success. The Momo habitat is targeted to support the Artemis III mission and eventually pave the way for sustained human exploration and utilization of the Moon.



MIT ARCHITECTURE



MOMO

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