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THE STATION TESSELLATION: EXAMINING THE ROLE OF ISS IN THE HUMAN EXPLORATION
EXPERIENCE**Abstract**

For two decades, the International Space Station (ISS) has been humanity's only home away from Earth. While the technical achievements and advancements of this paradigm-shifting program are astounding, it has had an equally large and unremarked-upon effect on the way humans view exploration. As humanity continues on the climb from the Earth to the ISS to the Moon to Mars, our organizing philosophies must change and evolve. We know now that the ISS is not only a vehicle, but a constructed place with its own rhythms and rules that must be followed or accommodated. The Moon and Mars- and the vast expanse of space in between- will have different rhythms and rules, but they too will need to be learned and understood if we are to be as successful there as we have been on ISS. The work currently being done on ISS, such as life support, environmental characterization, and modes of operation will all pay directly forward to these goals. This paper will examine the ISS as a constructed place, and go into detail on some of the systems, technologies, and procedures being developed onboard that will directly affect how we voyage to the Moon and Mars. While our future destinations are harsh locales that are inhospitable to human life, our ISS experience has shown us that we have the talent, creativity, and dedication to be able to turn them into a home.