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# SEMI-PERMANENT EXTRATERRESTRIAL OUTPOST: EARTH BENEFITS

**Abstract**

The daily temperature swings, long days, poisonous grounds, dust plumes, no atmosphere, and extreme exposure to radiation. Why would a human being want to live in that environment? Creating a semi-permanent outpost on the Moon or Mars will be a very demanding mission. These celestial bodies are inferior in energy compared to Earth. Solar power will not be sufficient. There is no atmosphere to create wind power. With no hot mantle, geothermal energy will not be a feasible option. With the lack of air, we will need pressurized habitats, which create stress on the structures. Furthermore, what will residents eat during their stay? The soil is too contaminated for cultivation. Humans will be exposed to many health issues. High exposure to radiation will initiate cancer. Low gravity will generate bones, muscle tissues, and cardiovascular problems. In addition, Those extremes conditions will be mentally challenging for these individuals. How can we solve all those dilemmas? This paper highlights the need for those extraterrestrial habitations and the long-term investment for colonization. How will Earth benefit from it? All these issues are considered when dealing with space architecture. After Apollo 11, we could not expect humans to live in a small 5-foot-high capsule for an extended period of time. Space architecture will be inevitable for the near future if we wish to continue space exploration for unconquered territories.