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The Field of Space Architecture

Space Architecture is the theory and practice of designing and building inhabited environments in outer space (SATC 2002, p.1).

The mission statement for space architecture was developed at the World Space Congress in Houston in 2002 by members of the Technical Aerospace Architecture Subcommittee of the American Institute of Aeronautics and Astronautics (AIAA).² Following the quotation above, Space Architecture as a discipline comprises the design of living and working environments in space and on planetary bodies, such as the Moon and Mars, and other celestial bodies. This includes space vehicles and space stations, planetary habitats, and required infrastructure. Earth analogs for space applications, simulation and test facilities are also included in the field of Space Architecture. Earth analogs may include Antarctic, airborne, desert, high altitude, underground, undersea environments, and closed ecological systems.

²The authors were among the attendees/signatories of the Millennium Charter which was drafted by 40 astronauts, engineers, industrial designers, managers, and researchers; The entire text of the Millennium Charter document can be downloaded via spacearchitect.org.