Space Architecture; the Role, Work and Aptitude
AIAA Space 2014

Abstract

Space architecture has been an emerging discipline for at least 40 years. Has it arrived? Is space architecture a legitimate vocation or an avocation? If it leads to a job, what do employers want? In 2002, NASA Headquarters created a management position for a space architect whose job was to "lead the development of strategic architectures and identify high-level requirements for systems that will accomplish the Nation's space exploration vision."   This is a good job description with responsibility at the right level in NASA, but unfortunately, the office was discontinued two years later. Even though there is no accredited academic program or professional licensing for space architecture, there is a community of practitioners. They are civil servants, contractors and academicians supporting International Space Station and space exploration programs. In various ways, space architects currently contribute to human space flight, but there is a way for the discipline to be more effective in developing solutions to large-scale complex problems.   This paper organizes contributions from engineers, architects and psychologists into recommendations on the role of space architects in the organization, the process of creating and selecting options, and intrinsic personality traits including why they must have a high tolerance for ambiguity.

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