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Cybersecurity in space systems, risks and countermeasures (4)

Author: Ms. Karla Fabiola Mayo Sánchez
Mexico

CYBERSECURITY IN LIFE SUPPORT SYSTEMS FOR LONG-TERM SPACE HABITABILITY

Abstract

As space exploration missions increases, so do the different devices and technologies used in it. With the introduction of new equipment in the design of space missions, there is an important need to cover in order to maintain control and security of these devices, as well as of the data and information involved in various missions. Efficiency in long-term space habitability will depend on the greatest security that can be provided in every sense to manned missions, which will depend on the correct functioning of the systems involved in them, such as life support systems. Seeking to reduce as much as possible the risks and vulnerabilities inherent to the use of IoT or interconnected devices that can be used to guarantee life support in space conditions, this article exposes the importance of implementing cybersecurity methodologies or processes that seek continuous improvement in the protection of the infrastructure, as well as the data and information with which different systems operate focused on providing life support, including medical and psychological benefits, among others, to maintain habitable conditions in long-term space missions.