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Moon, Mars and Beyond: Analogues, Habitation and Spin-Offs (2)

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HUMAN FACTORS STUDIES IN MARS ANALOG MISSION OF ILEWG EUROMOONMARS : TWO ROTATIONS

Abstract

After the establishment of the Space Age physicians, human factors engineers and psychologists are anxious to work on people's capability to meet up the physical, psychological, and interpersonal strains of working in space. Perceptive way of human's exertion in space -exploration analogue environments permits the advancement and testing of countermeasures and reactions to potential harmful situations, and can thus assist in development of new measures in undertaking mission efficiency and safety. Short duration analogue studies, such as those being accomplished at the MDRS, Utah, USA, propose a chance to study mission operations and human factors in a simulated environment and contribute to explore the Moon and Mars plans missions (ILEWG EuroMoonMars). The MDRS Crew 100B and 114 ILEWG EuroMoonMars, performed 15 days studies and provided a unique insight into human factors issues for space exploration. In this study, 20 human factors were taken into account and analyzed by subjective and objective means during 100B and114 ILEWG EuroMoonMars and results of all were summarized. From the results of this study, we concluded that strong health of the individual and the crew as a group is mandatory to encourage high performance and the satisfactions of mastery and achievement to bolster health. On the other hand poor health or dwindling performance could initiate a vicious downward spiral, and that should not be an option. Also, we observed a strong positive correlation between health and performance.