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Strategic Risk Management for Successful Space & Defence Programmes (4)

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REDUCING THE STRATEGIC RISKS TO COMMERCIAL LUNAR MISSIONS USING PEOPLE
MANAGEMENT APPROACH.

Abstract

The planned growth of commercial activities on the Moon will result in the increased number of people and projects being set-up in a short timescale. With growing number of inhabitants, the current Astronaut selection process based on carefully matching character and skills to seamlessly work together in an extreme environment will not be sustainable and will pose strategic risks to the mission goals achievement. Compromise will need to be reached to match technical and soft skills.

People management in the lunar base will extend from ensuring the physical and psychological needs are met to upholding the personal motivation of each individual. Harsh environment and commercial delivery will impact individuals with an increase of pressure. The authors of this paper present an overview of the key risks to the Lunar Human Exploration Missions caused by lack of approach to people management. Additionally, the financial risks are quantified.

A summary of people management techniques used in extreme environments on Earth such as Oil rigs and Arctic Circle is provided. Additionally, the authors study the impact and lessons learnt from COVID-19 isolation into strategic lunar settlement team management including the organisational structure, people and task management system.

Opportunities are identified to read the techniques across to Lunar Management. The authors study the optimum method of team communication between Earth and the Lunar settlement. The most efficient duration of the mission from commercial and psychological perspective is presented.

The study is concluded with the set of guidance for people and project management in an extra-terrestrial environment to reduce strategic risk of losing the mission using people management techniques to increase productivity.