66th International Astronautical Congress 2015

HUMAN SPACEFLIGHT SYMPOSIUM (B3) Interactive Presentations (IP)

Author: Mr. THANGAVEL SANJEEVIRAJA Hindustan University, India, stvaero@gmail.com

Dr. Santhanakrishnan Ramraj Hindustan University, India, rsanthanakrishnan2@gmail.com

EFFECTIVE ANALYSIS OF SPACE STATION SYSTEMS REQUIREMENT FOR EXPLOITING SPACE EXPLORATION IN 2015.

Abstract

International Space Station (ISS) and Tjangong can be proud of having completed one of the most ambitious engineering projects envisioned. The space station programs are depends on the utilization achievement in the coming years. Many researchers are involved to utilize and exploit of spaceflight systems in a long term goal. It is more envisaged to analyze the facilities and required ground experiments which are feasible to handle in on-orbit activities. The current technology can be enriched by relationship for human explorations beyond earth's neighborhood to carry on supporting technology and to explore possible promise with emerging space agencies. The extensions of space station operations to future and beyond is crucial to maximize use of research platform and to realize its full potential. In this research paper is discussed from many different perspective such as continuous access to microgravity, high vacuum and the conditions to create ultra high vacuum, as well as continuous presence in the space environment, enabling long experiment runs and cumulative set of experiments which needs more significant power and instrument support services at a low altitude and also extend the human support and transportation resources which is more enables testing, modification and development of R&D test beds, instrument and other research activities.