IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3) Astronaut Training, Accommodation, and Operations in Space (5)

Author: Mr. Jamel Metmati
THALES Services, France, djamel.metmati@thalesgroup.com

THE COMMERCIAL ASTRONAUTS IN THE NEW SPACE: TRAINING AND REQUIREMENTS

Abstract

New Space provide new services in low orbit from Space assets to support the ground activities. As Space begins to be no unique domain of astronauts and launchers from governmental agencies, it means people going in Space spread on the commercial requirements. These push on the capacities to send people in low orbit to check the Space assets need to the ground. Above all, the assets should maneuver in the safety context in regard of the spacecraft cost. Even if the monitoring and control can be done from the ground station, others parameters will mitigate by visual, avoiding the loss of assets: Space meteorology and debris. It needs astronauts from commercial compagnies using the infrastructure on the ground from governmental agencies. The Space station would be also useful to give support in Space for the technical maintenance of assets in orbit. The mission cycle to go to Space will no change but adapt to the requirements of commercial mission. If the training could be the same, some training on the ground moves to the specific tasks on the assets launched by the compagny. Moreover, the astronauts number would provide a reserve to go to Space in short term to repair or improve the assets. To do it, the international station should be updated by an additional module in which the commercial astronauts would work in Space.