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

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THE ESA BME/EUROCOM INTEGRATION: COMBINING MEDICAL OPERATIONS AND SPACECRAFT COMMUNICATION

Abstract

The traditional setup of flight control operations - both in the US and Russia - foresees two separate console positions for space-to-ground communication and medical operations. On the one hand, the Spacecraft Communicator, typically an extension of the crew office and training team, takes care of everything related to operational communication between Mission Control and the on-board crew. On the other hand, the Biomedical Engineer is an emanation of the medical community, tasked to oversee the health and well-being of the astronauts during spaceflight. The European ISS Flight Control Team has mirrored so far this setup with separate ESA BME and EUROCOM console positions. This configuration is in the process of being changed with the establishment of a combined ESA BME/EUROCOM position. This position will operate from the European Astronaut Centre in Cologne and be tasked to implement both medical operations and spacecraft communication in a synergistic and integrated fashion. The paper explores the rationale for this innovative concept, its initial setup as well as its expected challenges and opportunities.