HUMAN SPACE ENDEAVOURS SYMPOSIUM (B3) Astronauts: Those Who Make It Happen (5)

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ORGANISATION OF THE ISS CREW TRAINING IN RUSSIA AND FURTHER DEVELOPMENT OF COSMONAUT TRAINING SYSTEM

Abstract

Cosmonaut training is a complicated, task-oriented process of acquiring professional knowledge, skills, proficiency and other qualities (moral, physical, endurance and stamina, etc.) as well as supporting of required health status and psychic preparedness to flights aboard manned spacecrafts. Cosmonaut training is governed by a great number of standardized and organizational-methodical documents. Training procedures are based upon organizational, technical, medical, scientific, testing and other methods and aids as well as the staff of experts that organize and conduct training. At present cosmonaut training within the frame of the ISS program is performed both in Russia and on the bases of the International Partners (IP). At that cosmonaut training in Russia enlarges and becomes more complicated owing to the necessity of meeting new requirements determined by the international character of the ISS program and permanent increment of the station configuration and resources. Such new elements as mastering of various multi-segment operations, control and maintenance of the IP's transport vehicles and modules, learning of the working language (English), ensuring of psychological compatibility of cosmonauts and astronauts in view of their intercultural differences, training of growing number of Russian and foreign crew members should be taken in to account in the training system. Our experience shows that IPs use different principals and standards of training, behavioral rules aboard the ISS, medical, psychological, and other requirements. Also the fact that beginning from 2009 there are 6 members in the crews aboard the ISS, and beginning from 2010 the crews include 3 Russian cosmonauts influences the cosmonaut training procedure. The organizational system of the ISS crews training in Russia, which is developed according to principles, defined by International Partners, taking into account their participation interests in the station construction and covers all phases of training, is discussed here. General methods, aids, and principles of the Russian cosmonaut training system as the requisite element of the space infrastructure in Russia, without which it is impossible to realize national space programs and international agreements on space research, are presented in the paper. Further complication of space technology, updating of computer technologies, complication of information flows for the ISS crew training require improving of cosmonaut training technology and its control.