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BORIS EGOROV: THE WORLD'S FIRST PHYSICIAN-COSMONAUT. DEDICATED TO THE
ANNIVERSARY OF HIS FLIGHT

Abstract

As the discussions arise around human deep space exploration, the role of a doctor as part of the crew is becoming more relevant. On one hand, even a most careful medical selection obviously can not guarantee that we will be able to anticipate and cover every medical situation possible in-mission. On the other hand, medical diagnostic equipment is constantly improving, and often times even cosmonauts themselves can carry out complex diagnostics under the guidance of specialists on Earth. In long-distance missions, the level of autonomy will determine the priority of a specialist on board over the ground specialists. Thus, the presence of a trained physician among the crewmembers in long-distance missions will be an undeniable advantage, if not a prerequisite. The first physician to ever fly into space was Boris Egorov, a Soviet doctor. October 12, 2024 will mark the 60th anniversary of his space mission. Cosmonaut-physician B.B.Egorov (together with spacecraft commander V.M.Komarov and cosmonaut-researcher K.P.Feoktistov) performed an orbital space mission on board of the Voskhod-1 spacecraft, lasting 24 hours, 17 minutes and 3 seconds. Throughout the mission, the crew tested a new multi-seat manned spacecraft, conducted research on crew performance and interactions in-mission, studies the impact of various space factors on the human body and conducted a comprehensive range of biomedical investigations with direct participation of Egorov. As V.I.Yazdovskiy, the founder of space medicine, mentioned: "... in this mission, we've achieved the perfect combination of cosmonauts in terms of their specialties..." - a cosmonaut, a scientist, and a doctor. After the mission, Dr.Egorov continued his career with the Institute of Biomedical Problems and made a great contribution to the development of space medicine and biology, becoming a recognized specialist in the field of molecular biology and cell physiology. His concept of the imbalance of the sensory elements in the vestibular system under microgravity as the cause for vestibular disorders laid the foundation for the countermeasures to motion sickness in space missions. Dr.Egorov successfully combined his research with the management of large space projects. B.B.Egorov was the author of more than 120 scientific papers. He was the Deputy Chairman of the Bioastronautics Committee of the IAF, a full member of the IAA (since 1973). He was awarded the Orders of Lenin, the Golden Star of the Hero of the Soviet Union, the Red Banner of Labor, the IAA Life Science Award and many other awards.