SPACE OPERATIONS SYMPOSIUM (B6) Human Spaceflight Operations (1)

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SPACE-TO-GROUND COMMUNICATION: ORIGINS AND DEVELOPMENT

Abstract

Real-time voice communication between the astronauts in space and the flight control teams on the ground has been a vital element of human spaceflight from the early pioneering days of Vostok and Mercury till today's long duration missions on the International Space Station. Across the borders and throughout time, the task of talking to the crew has been traditionally assigned to a single position in the control centres (e.g. CAPCOM, GLAVNY). The present article will outline the evolution of such position in the main human spaceflight programs. The technical implementation of the voice link will be briefly described, while the main focus will be on the people assigned to the job, their role and responsibilities and how they were selected, trained and structured in their respective organizations. The US and Russian approaches will be compared and the role of Europe outlined in its evolution over the years.