

IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (E1)
Interactive Presentations - IAF SPACE EDUCATION AND OUTREACH SYMPOSIUM (IP)

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VIRTUAL REALITY TECHNOLOGY AS AN EFFICIENT INSTRUMENT OF SPACE EDUCATION
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Abstract

It is well-known that virtual reality technology is widely used in cutting-edge rocket engineering, since it has certain advantages and opens new opportunities as to perception of products under development by customers, and unveils novel ways of projects visualization and implementation to contractors. At the same time, virtual reality technology can be used for development of software aiming at staff training, building virtual models of space hardware and visual demonstration of its operation's principles. This is achieved owing to the fact that this technology allows to adapt designer's 3D-models, starting from early stages of development, to interactive software environment, and under conditions close to real ones to visually display hardware composition and its operation's principles. In addition, this technology represents an important method of creation of multimedia presentations, which in its turn gives a possibility of immersion into virtual space and of interaction with a product under development. This paper will present Yuzhnoye's experience in utilization of virtual reality technology in rocket engineering, staff training and in market promotion of the company's products. It will be illustrated by video presentations produced at a dedicated Yuzhnoye's department which is responsible for creation of multimedia products being used for space hardware development, training, marketing and in support of international cooperation.