Return to the Moon (02)
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PROGRAM-MATHEMATICAL APPARATUS FOR THE SYSTEM ANALYSIS OF OUTER SPACE OBJECTS EXPLORATION PROGRAMS BY THE EXAMPLE OF THE ANALYSIS OF LUNAR EXPLORATION PROGRAMS

Abstract

The program–mathematical apparatus of the system analysis of outer space objects exploration programs is developed. The application of this apparatus makes it possible to choose the most effective variants of manned missions for the further exploration of near-Earth space and for the tasks of Lunar and Mars exploration at different time fence. Concerning the question about Lunar exploration, the way for the development of on-planet lunar infrastructure is examined, the analysis of freight flow between lunar and near-Earth space infrastructure is conducted, the recommendations about nomenclature of launch vehicles for the realization of Lunar program are generated. In the issue of conducted analysis different variants of Lunar exploration roadmap are introduced.