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THINKING OF INTERNATIONAL COOPERATION FOR SPACE EXPLORATION

Abstract

International development is the direction and goal of world aerospace development, and it's also an important measure and an inevitable way. With the successful completion of the International Space Station and the establishment of a coordination framework, all space agencies in the world should timely assess their common interests and goals in human space exploration on the basis of human destiny community, focusing on space exploration beyond the Earth. The report starts with basic exploration questions, aiming to explore the value and approach of international cooperation in space exploration, including possible future breakthroughs of the International Space Station, and bring human space rights into the broader international agenda for the benefit of all mankind. The report first recognises that individual space exploration activities can achieve greater success through coordination and cooperation. From today to the foreseeable future, low earth orbit, the moon, Mars and near-Earth asteroids are the main targets of human space exploration, many new technologies and engineering will be required. On the one hand, space exploration is the only way to achieve the ultimate goal of expanding human presence in the entire solar system and creating sustainable communities outside the earth. It should be guided by the promotion of international cooperation. On the other hand, even the most preliminary exploratory behaviour requires a large number of high-scale and high-complexity machinery and manual tasks. It is difficult for one country or several countries to achieve effective breakthroughs. Secondly, by analysing the strategic advantages of space exploration, the next step in space development is to establish a human outpost outside LEO and explore specific areas of the moon to evaluate its construction potential; determine and evaluate technical standards and scientific production guarantee requirements through intellectual property rights and quality standards. In addition, the design of future space exploration should draw on the experience of all existing mechanisms to meet the expectations of many stakeholders, including the public. The report analyses potential international cooperation organisations to support broader cooperation than the International Space Station partnership. Finally, according to the strategic and social importance of human space rights, some recommendations on key areas of international cooperation in space exploration are given, including building an integrated architecture and formulating general transportation policies for LEO and all human space countries, establishing a comprehensive human space situational awareness system, and creating opportunities for as many countries as possible to participate in space exploration.