

IAF HUMAN SPACEFLIGHT SYMPOSIUM (B3)  
Commercial Human Spaceflight Programs (2)

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SEVERAL IDEAS FOR DEVELOPING COMMERCIAL SPACE TOURISM BASED ON DIFFERENT  
SPACE ACTIVITIES**Abstract**

Space tourism will be one of the main contents of manned space activities in the 21st century and the main driving force for future manned space development. Manned spaceflight will be transformed from the professional activities of a few astronauts into recreational activities for the general public. The first part of this article will elaborate the definition, classification and characteristics of space tourism of which the activities can be divided into five categories: travel on the aerospace facilities on the ground, travel at the edge of space, travel in zero gravity space suborbital flight and orbital flight. The second part will outline the development status of space tourism on the world, and mainly introduce the technical methods of space flight of Virgin Galactic, XCOR and Blue Origin etc. The third part will combine the present situation of China's space development, and put forward idea and different stages of developing space tourism. The first stage is travel on the aerospace facilities on the ground with the existing astronaut ground training facilities and equipments; the second stage is travelling at the edge of space with the weightless plane as a parabolic flight allowing tourists to experience the weightlessness of space flight; the third stage is suborbital space tourism in which tourists can enjoy the suborbital flight with an aircraft the fourth stage is orbital space tourism using ShenZhou manned spacecraft which allows tourists to fly around the earth's orbit. The fourth part of this article will propose measures for the space tourism development, from the aspects of technology, security, business model and laws and regulations.