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SPACE TRANSPORTATION SOLUTIONS AND INNOVATIONS SYMPOSIUM (D2)  
Launch Vehicles in Service or in Development (1)

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THE ABILITY STRIDES OF NEW GENERATION LAUNCH VEHICLES OF CHINA

**Abstract**

Launch vehicle is an important prerequisite and foundation to carry out space activities. It is a guarantee to realize disposal, reconstruction, extension and maintenance of spacecrafts, and is the carrier of the large-scale exploitation and utilization of space resources. Face to the future, China will establish a space transportation system with consummate ability, various types and excellent performance, to comprehensively satisfy the diverse requirements and achieve the capability goal of “affordable, reliable, fast, and maneuverable”. Furthermore, constantly promoting China aerospace career to step on a new top, and accelerating the realization of the dream of powerful space nation. China launch vehicle system will promote the batch production ability and reliability of active service launch vehicle and develop a new generation of non-toxic pollution-free launch vehicle such as CZ-5CZ-6CZ-7 and achieve first launch on schedule at the same time, so as to implement the ability strides. Deepen the argumentation of heavy launch vehicle, reasonably program the development of solid rocket, and continuously explore technique approaches to low cost launch vehicle. Intensify the research of multitask adapted upper stageheaven and earth round-trip transportation system to substantially improve China’s capacity of exploring and getting in and out of space. In this paper, a comment about the present and future of China aerospace transportation system is given and suggestions for the main direction of future development and key technologies are put forward.