Paper ID: 55544

Space Stations (9) Space Complexes Utilization (2)

Author: Mr. lei jianyu 501(c)3 organization, China, leijianyu28@126.com

RESEARCH AND DEVELOPMENT OF TIANZHOU-1 CARGO SPACECRAFT

Abstract

The development process, the main technical solutions and the technical achievements of the Tianzhou-1 cargo spacecraft was introduced and the follow-up engineering applications were prospected. Tianzhou-1 cargo spacecraft is the first dedicated cargo transportation vehicle of China. The successful implementation of its flight test marked the perfect end of the space laboratory phase mission. Key technologies such as cargo transportation, propellant supplementation, and full-automatic fast rendezvous and docking were broken through in Tianzhou-1. The comprehensive technology of Tianzhou-1 was at the international advanced level.