

HUMAN SPACEFLIGHT SYMPOSIUM (B3)
Utilization & Exploitation of Human Spaceflight Systems (3)

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ACHIEVEMENTS AND EXPECTATION OF TIANZHOU-1 CARGO SPACESHIP

Abstract

The cargo spaceship named ‘Tianzhou’ is the newly-developed manned spacecraft of china. It can supply goods and propellants for the space station or space laboratory, and takeback various wasted materials from them and destroyed in the atmosphere. The first cargo spaceship ‘Tianzhou-1’ will be launched by the Long March-7 carried rocket in Hainan spacecraft launch center. Tianzhou-1 will dock with Tiangong-2 space laboratory automatically, which has been launched in 15th, Sep. 2016. The two spacecraft will carry out propellant supply experiment in the orbit, which is one of key technology must be mastered for building china’s own space station. This paper is mainly to introduce the general design scheme, technical features, mission planning and effect of Tianzhou-1.