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DESIGN AND APPLICATION OF REMOTE TEST MODE FOR SPACE STATION

Abstract

In view of the fact that the design and assembly test of the Chinese space station are not in the same area, a remote test mode is designed to solve the need for efficient completion of the test and verification in the off-site mode, and at the same time prepares the technical preparation for the space and ground support during the operation of the future space station. Two main remote test modes, monitoring mode and command mode, are designed, and a full-process automated test mode is designed. A variety of remote test scenarios are designed according to the mission characteristics of the space station, and the unmanned flight mode, manned mode and maintenance mode are solved. Various test requirements in the mode of rendezvous, rendezvous, and assembly construction have realized the comprehensive control of the test data and technical status of the test site in the off-site mode, so that the experts can be concentrated and the occupation of personnel is reduced. Effective support for the smooth implementation of space station missions and the development of on-orbit operations.