

SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
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SYSTEM DESIGN AND MANUFACTURE OF CHINA COMPASS SATELLITE

Abstract

From 2000 to 2003, China has launched three Compass Test Satellites successfully, the Compass Test Satellite System was developed. China began to provide the RDSS service in China area around through the test system. Based on the experiences accumulated from the Compass Test Satellite System, China decided to build the Compass Navigation Satellites System, which may provide both the RNSS service and the RDSS service, in 2004. The first step is to develop a regional navigation satellite system, and then the global system will be developed as the second step. According to the system requirements, China Academy of Space Technology (CAST) had completed the total work of the satellite system design and the main work of the satellite manufacture. Up to now, 10 satellites for the first step of the Compass system had been launched successively. By the end of 2012, CAST will complete the manufacture of the left satellites for the first step. In this paper, the function and the composing of the China Compass Satellite System is introduced. Besides, the experience of the design and the manufacture of the Compass Satellite System is summarized. At last, the analyzed result of the main character data about the Compass satellites on orbit is given.