

SPACE COMMUNICATIONS AND NAVIGATION SYMPOSIUM (B2)
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A REVIEW OF NEW GENERATION LAUNCH VEHICLES TT&C SYSTEM TECHNOLOGY IN
CHINA

Abstract

According to the diversity of orbital missions and complicated external environment, the up-going control messages transmission requirements of China's new generation launch vehicle and space environment safety requirements with the characteristics of high bit rate, high coverage, high precision measurement have been raised. During recent years, China has carried out advanced technical application of space-based monitoring, multi-tone combination control, integration of measurement and control, data transmission and so on. This paper presents the development and status of China's launch vehicle telemetry, track and command(TTC) system, including the usage patterns, advanced technology and key development direction.