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DEVELOPMENT AND APPLICATION OF CHINESE AEROSPACE SYSTEMS ENGINEERING
METHOD

Abstract

China's aerospace industry is the birthplace of the ideas and methods of Chinese systems engineering, is also the main driving force for the development of Chinese systems engineering approach. Under the guidance of Mr. Qian Xuesen, China's aerospace industry team gradually explored the systems engineering approach suitable for Chinese national conditions, and applied in the early aerospace projects successfully. Later in the 1980s, under the leadership of Mr. Qian Xuesen, some Chinese scientists carried out a special seminar on systematology to promote the use of aerospace systems engineering approach to the social and economic field, and proposed the methodology of meta-synthetic engineering from the qualitative to quantitative. In the 1990s, the China's aerospace industry met many difficulties and fails, the China aerospace team proposed a number of new systems engineering approach, including the double-five rules for quality close loop. With these methods, China aerospace industry strengthened the management of the project, and changed the adverse situation. In the new century, the China's aerospace industry made market-oriented reforms, developed towards all the world, and gradually establish the mechanisms and methods that not only can guarantee the success of aerospace program, but also can support the long-term development for the industry, and gradually formed the Chinese systems engineering methods with Chinese characteristics. The Chinese systems engineering method has supported the healthy development of China's aerospace industry, and provide reference for the development of China society, economic and other fields. The Chinese government and many industries in China is studying the aerospace systems engineering methods, put it in their own work, and gain many successes.