

# Innovation and practice of aerospace products closed loop problem solving management

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**Abstract:** Aerospace products closed loop problem solving management (APCLQSM) is series of activities including analyzing causes and mechanism for the quality problems identified in product design, production, test and services technologically and managerially, and taking corrective actions and preventive actions. The scheme provides a systematic and scientific procedure to mitigate potential quality risks, solve quality problems and avoid their recurrence. As a mandated quality assurance method , APCLQSM is widely used in the development process of aerospace products to ensure mission success in China. Some issues, such as incorrelative problem definition, inadequate cause analysis, impracticable corrective actions, undefined scope of lesson learning and uncertain process of knowledge capture, are encountered in the application process, which limit the effectiveness of this method. To resolve these issues, CALT improved the process of APCLQSM and proposed quality problem clues table and APCLQSM baseline. Historical quality problem closed loop solving information are extracted as a word into quality problem clues table, which support the definition of quality problem as an index table. APCLQSM baseline integrating quality problem knowledge management and FRACAS is proposed to improve the effectiveness of APCLQSM.