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ACTIVITIES (D5)

Risk Management for Safety and Quality in Space Programs (1)

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A QUALITY MANAGEMENT METHOD FOR INTEGRATED EQUIPMENT BASED ON RISK
MATRIX

Abstract

Small rocket is paid widely attention in recent years because of its properties of low cost, high reliability, quick response and flexibility. Due to space limit, higher demands such as smaller volume, simpler operation and integrated function have been brought up to its inner equipments for small launch vehicle. The integrated equipment suitable for small launch vehicle has complex functions and many research process links, and this leads to more risks in many links such as design, manufacture, verification, acceptance check and use. Traditional method of risk analysis cannot be carried out effectively on integrated equipment. In this paper, a new management analysis method based on risk matrix is raised aiming at integrated equipment, which concludes nine risk control key points for product's different level and different manufacturing process. It has been applied to the fourth grade integrated measurement assembly equipment of CZ-11, and conducts effective risk recognition and control for the whole research process. The product quality has been guaranteed, and the aim of zero quality problems in full life cycle has been achieved. The product design and delivery is made sure for zero repeat.