



Americas Aerospace Quality Standards Committee

Frequently Asked Questions

AS9017 Control of Aviation Critical Safety Items (CSI)

- **Does this requirement apply to government contracts only?**
 - Yes, Aviation CSI's are defined by United States (U.S.) Public Law 108-136, Section 802. The law requires that the Secretary of Defense prescribe in regulations a quality control policy for the procurement of Aviation CSI's.
- **What are Aviation Critical Safety Items (CSI's)?**
 - A part, an assembly, installation equipment, launch equipment, recovery equipment or support equipment for an aircraft or aviation weapons system that contains a characteristic, any failure, malfunction or absence of, which could cause:
 - » A catastrophic or critical failure of the system
 - » Personal injury or loss of life
 - » An uncommanded engine shutdown
- **Why was the DoD's Aviation CSI process started and why is it important?**
 - DoD Aviation CSI processes were developed to standardize terminology, definitions, criteria and management procedures across the military services and defense agencies in an effort to minimize variation and improve product Quality.
- **Are there other policy documents governing Aviation CSI's?**
 - Yes, DoD issued DoD-4140. 1-R, DoD Supply Chain Material Management Regulation Section C8.5, DoD Aviation Critical safety Item (CSI)/Flight Safety Critical Aircraft Part Program and DoD 4120.24M as well as others. <http://www.dscr.dla.mil/ExternalWeb/UserWeb/AviationEngineering/TechnicalOversight/CSGuidanceandPolicy.htm>
- **Why is it important to identify CSI's?**
 - CSI identification ensures that proper source approval requirements are applied to potential new suppliers. This is particularly important when evaluating offers from sources that have no or only limited knowledge of the items application, design intent, failure modes, failure effects, critical design characteristics or critical manufacturing, repair or installation processes.

- **How do Commercial-Off-The-Shelf (COTS) parts relate to CSI policies?**
 - Safety implications apply whether an item is uniquely developed for the military, already existed within the military inventory, or is available as COTS. Parts used in DoD aviation that have critical safety implications need to be identified as such.
- **Are contractors required to perform 100% inspection of all CSI's?**
 - The contract, technical specification, or approved Quality plans and program direct the nature of Quality assurance on aviation CSI's. Because of the consequence of failure, 100% inspection may be required but sampling and Statistical Process Control (SPC) techniques may also be authorized.
- **What is the difference between a Critical Characteristic and Critical Safety Characteristic?**
 - The term Critical Safety Characteristic was originally defined to address critical characteristics for CSI's. In this context, the terms are synonymous.
- **How is the AS9017 standard organized?**
 - The standard is organized according to the AS91001 process structure (i.e. the “8 elements”) where the AS9017 requirements are to be considered in addition (and complementary) to the applicable AS9100 requirements. The bulk of the new standard's requirements are contained in the “Product Realization” and the “Measurement, Analysis and Improvement” sections and prescribe the requirements that a supplier must have in their system for key processes.
- **Is AS9017 intended to as a standard for registration via a 3rd party?**
 - It is not intended as a standard for registration via a 3rd party. It is intended that the standard be contractually flowed to suppliers via the prime / first tier contractor, and thereby auditable for compliance as a customer requirement as part of a Quality Management System audit.
- **What is frozen planning and is it required for all CSI's?**
 - Frozen planning is the solidification of manufacturing plans and processes. Planning is considered frozen upon approval of a first article test. The objective is to ensure that manufacturing practices that have demonstrated acceptability will continue to be used by the supplier.
- **Is serialization required for all CSI's?**
 - Yes, serialization is required unless it is not practical due to size, material property, unreasonable or excessive cost, or other requirements specified by the cognizant Service Engineering Support Activity (ESA).