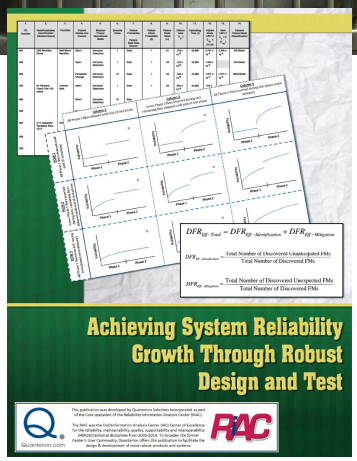
RMQSI Knowledge Center

Reliability Problem Solving

What is it?

Reliability Problem Solving addresses the use of an appropriately tailored suite of reliability engineering activities, tools, methods, procedures, etc., to cost-effectively identify and correct design/process reliability problems.



What's the payoff?

Reliability problem solving activities actively promote reliability growth by identifying and eliminating/mitigating failure modes/mechanisms in designs and processes. Successfully minimizing the effects of failure can result in lower risk in meeting reliability requirements, an increase in new/repeat business and reduced warranty and maintenance costs.

How can we help?

- Ensure that your reliability data is effectively collected, analyzed and used for informed decision making: Failure Reporting, Analysis and corrective Action System (FRACAS)
- Perform analyses of your designs/processes and make recommendations to help you better understand the causes of failure: Failure Modes, Effects and Criticality Analysis (FMECA), Fault Tree Analysis (FTA), Worst Case Analysis (WCA), Physics-of-Failure (PoF) Analysis
- Perform analyses of your test programs and make recommendations to ensure a cost-effective, value-added reliability test strategy: Design of Experiments (DOE), Accelerated Life Test (ALT), Reliability Growth Test (RGT), Reliability Screening