



ASQ CRE Prep course

Lesson VI. A. 2. c.

Maintenance Strategies

Allocation

Method II MIL-HDBK-472

$$MTTR = \frac{\sum_{i=1}^n \lambda_i t_i}{\sum_{i=1}^n \lambda_i}$$

n = # subsystems

λ_i = i^{th} system failure rate

t_i = i^{th} system time to repair



Method II MIL-HDBK-472

$$MTTR = \frac{\sum_{i=1}^n \lambda_i (KMTTR_i)}{\sum_{i=1}^n \lambda_i}$$

K = allocation factor



Why do an Repair Allocation

To hit availability target

Minimize repair downtime

Minimize repair costs



What can you
change to reduce
MTTR?



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Lesson VI. A. 3.

Availability Tradeoffs