

Maintenance Tip July 2015

RCM - Levels of analysis

New facilitators often struggle with the concept of different levels of analysis. Let's look at it this way - you only need to analyze to the level of depth that will enable your analysis team to arrive at a decision that can manage that single failure mode.

Just to make it a little more complicated it also depends on the criticality of the system being analyzed.

For example analyzing the failure mode "printed circuit board fails" can be perfectly valid as when that circuit board fails it is simply replaced with a new one.

It could also be valid to analyze down to the level where an individual diode failure is identified. Perhaps this is part of a military system where mission failure could have catastrophic effects.

One key learning point to understand here is that if you start analyzing every diode on a circuit board you will be analyzing for a very, very long time. If the end result of that diode failure is 10 minutes of downtime which actually does not lead to a loss of production. Why analyze to component level when the result will be "replace the circuit board?"

