

# Does an FMEA Improve Accelerator Reliability?

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The Australian Synchrotron Light Source has a good record for delivering High Beam Availability. As the Facility is maturing and we have tamed most of the faults arising from design and construction issues we are experiencing increased downtime from “ageing” equipment.

Given limited budgets and manpower how do we manage our maintenance to continue to improve reliability? Since the 1960’s Reliability Centered Maintenance, originally developed for the Aviation Industry has become the Standard in many industries. An integral part of this process is to undertake a Failure Modes and Effects Analysis (FMEA). This was undertaken on the Accelerators last year and its outcomes are being applied for machine maintenance and improvement.

How did we conduct the FMEA?  
What were the major outcomes?  
How has this changed the way we do things?  
Have we improved reliability?  
Has it been worth the effort?

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