

Maintenance Support Design / Redesign (MSDR)

5-Day Training Program

INTRODUCTION

Maintenance is a critical process and an expensive part of business costs, particularly for capital intensive organizations. One of the most difficult aspects of maintenance is the design and implementation of its support requirements.

Support requirements are often the most complex aspect of the maintenance program. If they are not designed correctly, it is unlikely that a maintenance program will work as expected. Moreover, as time goes on, the maintenance support requirements will change. This means that they need to be redesigned.

This is an outcomes focused course. The inputs are the data requirements to enable methods such as FMECA, FTA, RCA, etc to be carried out with integrity. However, the important part of that work is to deliver products such as the range of plans that can be used to economically support the operations and maintenance programs. That is, the outcome is the structure around the development of maintenance strategies such as RCM, TPM, etc.

An important aspect of this course is the focus on the methods of developing and assessing the elements of maintenance plans to ensure that they are continuously reviewed for relevance and usefulness.

The course is applicable to many organizations such as mining, petrochemical, infrastructure, defence, local government, primary industry, facilities, etc. e.g. In a defence application, the outputs can link to the LSAR.

The course can be tailored to suit the specific needs of an organization if required.

PROGRAM

Day One

Underpinning Processes

- Total Cost of Ownership
- Configuration Management
- Codification
- Six Sigma Principles
- Obsolescence management

FMECA/FTA/RCA - practical approaches

- Reliability, Availability and Maintainability Principles
- Failure Mode, Effects and Criticality Analysis (FMECA)
- Fault Tree Analysis (FTA)
- Root Cause Analysis (RCA)

Day Two

Corrective maintenance tasks

- Description
- Terms and Definitions
- Determination
- Implementation

Preventive maintenance tasks

- Description (e.g. RCM, TPM, etc)
- Terms and Definitions
- Determination
- Implementation

Day Three

Maintenance levels and repair policies

- Maintenance level determination
- Repair policy determination
- Maintenance plans

Maintenance resource requirements

- Scope of maintenance resources
- Determination of resource requirements
- Implementing resource requirements
- Resource plans



Day Four

Maintenance procedures

- Mechanics of a procedure
- Error proofing
- Language skills
- Verification & validation

Maintenance support personnel competency

- Understanding scope of skills
- Setting competencies
- Managing competencies in the workplace

Day Five

Workshop

A one day workshop to work through practical examples and workplace scenarios.