

## Reliability-Centred Maintenance 2 (RCM2) Facilitator Course Programme

Course lecturing material is provided by means of CD ROM based presentation, worked examples on flip charts and practical exercises by the tutor. All delegates receive materials to add to their existing RCM2 training notes.

- Eligibility:** All delegates must have completed the Introduction to RCM2 course to be eligible for this programme.
- Course Venue:** At client site.
- Course Assessment:** All delegates will be required to undergo an examination at the conclusion of the course. The assessment is required to ensure each delegate can competently facilitate an RCM2 analysis. Delegates will also be assessed during the course. Delegates who complete the course and pass the assessment will be issued with a certificate of competency.
- Course Duration:** The course will be of ten days duration. This period is required to develop a level of competency sufficient to conduct a basic RCM2 analysis. It may be necessary for some delegates to obtain assistance to complete more complex analyses and in particular, the complex mathematics associated with determining the maintenance requirements for some hidden functions. An approximate timetable is shown below. This may be varied to account for particular needs as the course unfolds.
- Day 1**
- Role of the Facilitator**  
Delegates work through the role of the Facilitator and develop an understanding of the technical, people, administrative and logistic requirements for managing an analysis. Each delegate explores the difficulties of managing group dynamics and the social issues encountered during an analysis. Through the use of exercises, the delegates explore the role of the Facilitator and the skills required to achieve good RCM analysis.
- Revision of RCM2**  
Delegates are provided with a revision of RCM2 basics. Each delegate is reacquainted with the seven questions of RCM and the processes used to develop the maintenance strategies for an item of equipment.

**Day 2**

**Facilitation Skills**

Development of the skills required to facilitate an RCM2 analysis. Delegates are provided with practical skills in communication and group management. The group is introduced to the evaluation procedures that will be used to assess their RCM2 competency.

**Functions - the key to successful RCM2 Implementation**

The development of functions is the most critical step of an RCM2 analysis. The development of functions requires particular skills to avoid a number of common pitfalls. This section of the programme generates an in-depth understanding of how to develop and write primary and secondary functions.

**Case Study Step 1 - Developing functions**

Using the lessons of the day, each delegate is required to facilitate a group in a controlled environment to build skills in the development of functions for a practical case study.

**Day 3**

**Functional Failures, Failure Modes and Failure Effects**

Building on the work of the previous day, delegates are provided with detailed tuition on the development of functional failures, failure modes and failure effects.

**Case Study Step 2 - Completing the Information Worksheet**

Each delegate is required to facilitate the development of the information Worksheet for the detailed case study. Each Facilitator is provided with feedback on their performance by both team members and the tutors.

**Failure Consequences and Preventive Tasks**

The second part of an RCM2 analysis is the development of the Decision Worksheet using the Decision Diagram. Detailed tuition is provided to ensure each delegate has the skills to facilitate the evaluation of the data on the Information Worksheet and develop a maintenance strategy that successfully deals with the consequences of the failure. Each Facilitator is assessed on their understanding of RCM2 and provided with positive feedback on their performance as a facilitator.

**Day 4**

**Hidden Functions and Failure Finding**

Delegates review Failure Finding and receive further training in the derivation of the basic Failure Finding formulae. Failure Finding Intervals are developed for more complex arrangements of Hidden Functions and delegates complete worked examples.

**Site visit - Zero Base Case Study**

Delegates spend as much time as required on site reviewing an asset for analysis, discussing the operating context with staff and gathering sufficient information to allow them to analyse the asset using RCM2 in the following week.

**Day 5-9**

**RCM2 Toolkit**

The Toolkit is introduced for the delegates to use during the following week, analysing the selected equipment.

**Conduct Zero Base Case Study**

Delegates work through a Zero Based Case Study and prepare presentation of analysis outputs for a “client” senior management team. As pressure builds on the facilitators, this period of the course will inevitably require some evening work which will be arranged with the group as required

**Day 10**

**Presentation of Zero Base Case Study results**

Each RCM2 analysis team presents the major findings and outcomes of their analysis to the equipment owners.

**Examination**

Each delegate sits an examination to assess their level of understanding. Passes are awarded accordingly.