

In this module we've learned how to:

- Describe Risk-based RCM
- Describe how the RCM methodology supports a broader asset management strategy according to ISO 55000
- Explain how RCM methodology uses failure and risk analysis to determine maintenance control strategies.
- Recall common RCM terminology and tools.
- Outline 7 sequential steps of an RCM process according to SAE JA1011.
- Describe seven different maintenance approaches.

Use the questions below to assess your current program and consider pursuit of RCM.

Risk-based RCM

1. Do I have an accurate, documented functional hierarchy?

☐ Yes ☐ No ☐ Don't know

2. Have I objectively identified my most critical, valuable assets or systems?

☐ Yes ☐ No ☐ Don't know

3. Which benefits of RCM are most relevant to my business objectives? Do I have a Reliability Engineer to execute and manage RCM duties?

- ☐ Safety
☐ Security
☐ Cost
☐ Reliability
☐ Work management
☐ Program efficiency

RCM and ISO 55000

4. Does my organization consider asset management part of the business strategy?

☐ Yes ☐ No ☐ Don't know

RCM methodology

5. Does my maintenance strategy for critical assets take into account that more than 80% of failures are random?

6. Assign a percentage to each maintenance category to reflect the volume work performed today at your site:
- | | | |
|--------------------------|----------------------|-----------------------|
| ____ interval/time based | ____ condition-based | ____ failure findings |
| ____ servicing | ____ corrective | ____ emergency |
7. Is my current maintenance plan based on and prioritized by the risk of failures?
- Yes ☐ No ☐ Don't know ☐
8. Consider a recent failure experienced at your site. Retroactively complete to the best of your ability the 7 steps of the RCM analysis:

Step 1: Operational Context and Functions

What is the system or equipment expected to do? What is the operational context of the equipment?

Step 2: Functional Failure

How did the asset fail to fulfill those functions?

Step 3: Failure Mode

In what way did the asset fail? What happened functionally that resulted in the functional failure?

Step 4: Failure Effects

What happened as a result of the failure?

Step 5: Failure Consequences

What was the impact of the failure?

Step 6: Tasks and Tasks Intervals

What could be done to predict or prevent the failure?

Step 7: Other Measures

Are there any other corrective actions or approaches to consider?