

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?