# 7 Steps of Reliability Centered Maintenance

The seven steps to classifying and analyzing risk



## **RCM Steps**

All classical RCM processes perform the following seven steps in order, occurring after classifying and analyzing risk.

#### **Step 1: Confirm Function**

Confirm the asset's functions, operational context, and desired performance standards.

What is the system or equipment expected to do? What are the circumstances/environment in which a system is expected to operate?

## Step 2: Identify Functional Failure(s)

Determine how the asset can fail to fulfill its functions, known as functional failure.

#### Step 3: Determine Failure Mode(s)

Determine an event that could trigger the functional failure. Note: the failure mode is not a root cause, but is the way or manner that the failure manifested. Example: A motor stopping is a functional failure. The reason the motor failed, such as a seized motor bearing, is the failure mode.

## Step 4: Predict Failure Effect(s)

Identify what could happen as a result of the failure, known as failure effects.

# Step 5: Classify Failure Consequence(s)

Classify the impact of the failure effects, known as failure consequences.

#### Step 6: Identify Tasks and Task Intervals

Identify and prioritize the tasks and task intervals than can predict or prevent each failure.

### **Step 7: Evaluate Alternative Strategies**

Evaluate the efficacy of other failure management strategies. Are there other corrective actions or approaches to consider, like a change to an operational procedure or a design change?

RCM Steps 1