

Aladon

The Risk & Reliability

GLOBAL NETWORK

RELIABILITY CENTERED MAINTENANCE (RCM2™)

WELL-DEFINED, MOST USED
RCM PROCESS IN
INDUSTRY
COMPLIANT TO RCM
SAE STANDARD



www.aladon.com

WHY CHOOSE ALADON FOR YOUR RCM PROGRAM?

- Aladon pioneered RCM for industrial application more than 30 years ago (RCM2™)
- Aladon applied RCM to every endeavor known to mankind and has brought real life experience with world-class training and consulting services
- Aladon places risk and reliability mainstream with Physical Asset Management
- Aladon changes minds and hearts of people responsible for reliability
- Aladon trains more people in RCM than any other RCM provider
- Aladon innovates with latest integrated methodologies
- Do not rely on luck to avoid catastrophic events
- Aladon empowers operators and maintainers

BACKGROUND AND HISTORY OF ALADON'S RCM METHODOLOGY:

Since the research that was done by the Maintenance Steering Group (MSG) led by Stan Nowlan and Howard Heap in the airline industry in the 1960s and 1970s which led to the subsequent release in 1978 of the report called "Reliability-centered Maintenance (RCM)", Aladon under leadership of John Moubray pioneered the development and implementation of RCM for the industrial sector. Moubray developed and trademarked the rigorous and robust seven question process called RCM2™. The seven questions of the RCM2 process follow the logic of the methodology that originated from the work by Nowlan and Heap and Moubray preserved the intent of their thought process; however, the 1978 report also gave birth to many derivatives and streamlined versions of RCM of which very few were actually close to the original intent of Nowlan and Heap. In 1986, Moubray founded Aladon and created The Aladon Network comprised of certified professionals with industry experience called Aladon Practitioners. The Aladon Network applied RCM2 on more assets and in more industries than any other form of RCM. Aladon and The Aladon Network have trained delegates around the globe in RCM2 course and applied RCM2 for more than 30 years in almost all endeavors known to mankind.

Because of the confusion that surrounded multiple versions of RCM, industry felt the need for a standard. The SAE JA 1011 standard (released in 1999) describes the minimum criteria a process must possess to be called RCM. John Moubray's book, called *Reliability Centered Maintenance (RCMII)*, is a key reference in the standard.

Aladon continuously reviews new techniques, technologies and standards to ensure Aladon's RCM is current and in line with industry needs to continue safe and effective operations of their assets while ensuring regulatory compliance. The following paragraphs will describe the RCM2 process and the Aladon training program and how you can become a Certified Aladon RCM2 Facilitator.



RCM2™:

Before we describe the RCM2 process, we need to define maintenance and RCM2.

The purpose of maintenance is:

To cause **any physical asset** to continue to do **whatever its users want it to do**.

RCM2 is:

The process used to determine what must be done to ensure that **any physical asset** continues to do **what its users want it to do in its present operating context**.

RCM2 does so by asking the following seven questions:

- What are its functions (what do its users want it to do)?
- In what ways can it fail (functional failures)?
- What causes it to fail (failure modes)?
- What happens when it fails (failure effects)?
- Does it matter if it fails (consequences of failure)?
- Can anything be done to predict or prevent the failure?
- What do we do if we cannot predict or prevent the failure?

RCM2 achieves this goal by focusing on the functional requirements (preserving the asset's functions - what the users want) while minimizing or eliminating the consequences of failures associated with these functions. RCM2 does this through applying these seven questions to every critical asset while using a robust decision logic to develop the most effective PM program. The outcome of the RCM2 process is a maintenance program that is both technically feasible and worth doing.

RCM2 will consider the following recommendations:

- Predictive maintenance
- Condition-based maintenance
- Preventive maintenance (scheduled overhaul/scheduled discard)
- Functional checks (Failure finding tasks)
- One-time changes (training, procedures, redesigns)
- No scheduled maintenance (run-to-failure)

The application of RCM2 leads to greater safety, environmental integrity, higher reliability and uptime, lower maintenance cost and higher motivation of workforce.



RCM2 EXECUTIVE OVERVIEW

The RCM2 Executive Overview is intended for senior managers and executives who are interested in operational sustainability, safety and reliability, environmental integrity and overall operational effectiveness. This one-day course introduces executives to the intricacies of modern asset management so that they are best prepared to actively sponsor an asset performance improvement initiative. Roles and responsibilities within a reliability improvement initiative are examined and the keys to success are discussed along with the review of actual case studies. A 2-3 hour RCM2 Overview session is also available for senior executives.

RCM2 INTRODUCTORY COURSE

The RCM2 Introductory Course provides a comprehensive introduction to RCM2 and its principles. This 3-day course is intended for those who are interested in understanding what RCM2 is and how it can be applied to define technically-based maintenance and reliability programs. During the course, delegates will apply best practices in answering the seven questions of RCM2 using a real life case study approach.

ADVANCED RCM2 FACILITATOR TRAINING, COACHING AND MENTORING

Aladon's Advanced RCM2 Facilitator Training consists of three stages. The first stage is completing the RCM2 Introductory Course. The second is completing the Advanced RCM2 Facilitator Course (10-day classroom training). The third stage is on-site mentoring and coaching designed to introduce the skills necessary to successfully lead an RCM analysis. An experienced Aladon Certified Practitioner will teach delegates to understand the skill sets and competencies of a facilitator through classroom application and coaching using real world case studies.

RCM2 FACILITATOR CERTIFICATION

The Aladon Certification Program assists you in taking all of your classroom training to the next level in your organization. The program is designed to provide the appropriate amount of coaching and mentoring to build your competency to the quality levels expected by Aladon, and in order to get certified, a 5-hour written exam must be passed. The Aladon RCM2 Facilitator Certification is a sought after prestigious qualification with worldwide recognition.

