

### Tired of surprises?

LOWER YOUR COSTS, REDUCE RISK AND INCREASE RELIABILITY.



#### THOUGHTWARE

Methodologies to manage the lifetime of your assets

#### SOFTWARE

Integrated software to support our proven methodologies

#### **TRAINING + CONSULTING**

Tailored solutions to fit your organization

#### Meet Aladon.

WE HELP YOU BUILD A RELIABILITY CULTURE SO THAT EVERYONE INVOLVED WITH ASSET MANAGEMENT AND DECISION MAKING HAS A LINE OF VISION ALL THE WAY DOWN.

#### WE IMPROVE YOUR BUSINESS PROCESS BY CREATING A RELIABILITY CULTURE.

We are the gold standard and industry leader for risk and reliability solutions globally.

We are your one-stop shop for integrating reliability thoughtware and software. Our global network serves every industry, in 100+ countries, on nearly every continent. We provide affordable solutions to maintaining your physical assets.



## Imagine your organization with a reliability culture

WE TRANSFORM THE WAY YOU DO BUSINESS

#### PUT THE ALADON ADVANTAGE TO WORK FOR YOUR ORGANIZATION

We want you to fully understand what can go wrong at your organization and still fall asleep at night. We help you build a reliability culture so that everyone involved with asset maintenance and decision making has a line of vision all the way down.

#### WITH OUR SOFTWARE AND THOUGHTWARE, YOU'LL KNOW:

- What you own
- Which assets are important and need priority
- How your assets work and their operating context
- How and when to maintain them or, alternatively, which assets to let fail

#### ALADON'S SUITE OF THOUGHTWARE & SOFTWARE RELIABILITY ASSET CRITICALITY RELIABILITY MAINTENANCE CENTERED & PRIORITIZATION -CENTRED TASK ANALYSIS MAINTENANCE DESIGN™ RISK CENTERED ROOT CAUSE FAILURE MODE, CONDITION FAILURE EFFECTS & CRITICALITY **ASSESSMENT** SPARES ANALYSIS ANALYSIS

### BY THE NUMBERS

**COUNTRIES** 

100

**LANGUAGES** 

21

**NETWORK MEMBERS** 

37

PEOPLE TRAINED IN INTRODUCTORY COURSES

100,000+



# LET'S TRANSFORM THE WAY YOU DO BUSINESS BY CREATING A RELIABILITY CULTURE

## HOW WE HELP YOU MAINTAIN & OPERATE ASSETS

We'll give you direction and guidance to successfully train and implement a reliability strategy focused on your asset management improvement objectives. We bring real-world experience to help you:

- 1. Assess your current asset management performance and benchmark your company against others in your industry.
- 2. Define a strategy for reliability improvement
- 3. Develop a financial business case for implementation
- 4. Train your team with our methodologies and software to select the appropriate strategy to bridge your asset performance issues



#### YOUR ONE-STOP SHOP FOR ASSET STRATEGY, MAINTENANCE AND PERFORMANCE

Ready for a world-class system to manage your assets? Aladon has combined our proven strategies with customizable software so that you can maintain and optimize your assets. You'll achieve the maximum long-term benefits of your organization's assets at a price you can afford.

Our goal is to help you proactively manage every phase of the asset life-cycle, and we do this by delivering a portfolio of reliability and asset management training and services supported by world-class software. It's a combination that is unmatched in the industry.

#### OUR SOFTWARE WAS DESIGNED WITH THE FOLLOWING IN MIND:

- Easy to use and navigate
- Capture important information and share it between applications
- Provide one tool for all your assets to align your strategies and maintenance with the International Standards for Asset and Risk Management (proactive strategy development and problem-solving)
- Integrate easily with Work Management Systems (e.g. SAP, Maximo) to provide flexibility

I WOULD LIKE TO TAKE AN OPPORTUNITY TO RECOGNIZE YOUR SOFTWARE TEAM FOR PROVIDING EXCELLENT AND QUICK RESPONSES AND SUPPORT TO US DURING THE REW ROLLOUT.

NAGARAJAN BABU, P.ENG., SYNCRUDE OIL, CANADA Reliability Rep - OM&S Team Leader - Equipment Strategy Development Equipment and Reliability Engineering

# ASSET CRITICALITY AND PRIORITIZATION (ACAP)

Key to building a reliability culture in your organization is creating a structure where you understand your assets' criticality to your operation. Without the Asset Criticality and Prioritization (ACAP) process, you can waste resources or worse, have critical equipment fail with rippling effects on your organization, people and the environment.

Using the ACAP rankings, you can identify where to focus your organization's capital, maintenance efforts and resources when you are applying and sustaining a reliability strategy. Whenever the operating context changes, you should review your asset criticality because this could change its failure impact.

# RELIABILITYCENTRED DESIGN™ (RCD)

Reliability-Centred Design (RCD) is a risk-based methodology for preparing your people and your assets for operational readiness – in its core RCD is founded on the robust principles of RCM and extends reliability thinking to include upper management's objectives early on in the design process. RCD supports ISO 55000 and the elements of life-cycle asset management and creates the foundation for establishing inherent reliability and continuous improvement. It does so by involving all the stakeholders and through simulation and optimization of the design.

Our experience shows that RCD not only saves on CAPEX through optimizing the design and reducing Change Orders during the construction and commissioning phases but continuously provides savings during operations and maintenance of the plant also (OPEX). RCD will soon be supported through Aladon's comprehensive software.





# RELIABILITY CENTERED MAINTENANCE RCM2<sup>TM</sup> AND RCM3<sup>TM</sup>

There are others who know about RCM. At Aladon, we know what RCM is about.

We designed our trademark RCM methodologies, RCM2<sup>™</sup> and its successor, RCM3<sup>™</sup>, with the optimization of your company's assets in mind. Our approach to RCM is one of the most effective processes to help determine and safeguard the reliability and maintainability of all your assets.

With RCM2 and RCM3, we help you implement an effective and cost-saving maintenance and risk-management strategy for each of your assets.

For more than three decades, we've used RCM2 to help organizations decide what must be done to ensure that any physical asset, system or process continues to do whatever the team wants and needs it to do.

In 2014, we introduced RCM3, taking everything we've learned over the years of researching and implementing Reliability Centered Maintenance to improve and enhance our approach to RCM.

Here's how RCM2 and RCM3 can support your organization's reliability culture:

- Increase reliability, availability and productivity
- Optimize maintenance and avoid unnecessary costs
- Boost safety awareness and environmental integrity
- Generate a better understanding of equipment behavior
- Share information across the entire organization

The effect of correctly implementing RCM using our methodology and technology can be tremendous, saving money, time, the environment and even lives.



### MAINTENANCE TASK ANALYSIS (MTA)

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Maintenance Task Analysis (MTA) is a fast and effective analysis used for less critical assets. It's a process that goes hand in hand with RCM for your organization's overall asset maintenance strategy.

MTA ensures that the tasks you perform are actually adding value to your reliability and risk management program. Unlike RCM, MTA is not a zero-base analysis, and it is used to optimize existing Preventative Maintenance (PM) programs.

Many tasks in existing maintenance programs add no value or are simply duplicated. MTA is the process we use to eliminate non-value-added tasks – those tasks that are not technically feasible or worth doing.

Aladon's REW software makes MTA more efficient because it can import PM task information for use within REW.

# RISK CENTERED SPARES (RCS)

Modern engineering stores hold a range of parts, from cheap consumables used in thousands annually to expensive, critical spares that may never be used over the plant's entire lifetime.

Up to 50% of inventory value may consist of spare parts that are used at the rate of one per year or less. Between 10% to 30% of the inventory can sit on shelves for the complete plant lifetime. Financially, perhaps these parts should never have been purchased? On the other hand, if they were not available when needed, the business could suffer severe downtime consequences.

Our RCS process and software, derived directly from Reliability Centered Maintenance, addresses these specific criteria for all inventory, whether consumables or slow-moving parts. We help you achieve substantial savings by applying the RCS method to expensive, slow-moving, critical parts. RCS determines the level of spare parts inventories based not on manufacturer's recommendations, nor on a subjective judgment of service level, but on the requirements of the equipment and maintenance operation that the inventory supports.

A well-executed RCS analysis provides the single most value in the reliability analysis process.

### ROOT CAUSE FAILURE ANALYSIS (RCFA)

Never again risk a loss in productivity and a drop in asset reliability to the unknown.

Aladon's Root Cause Failure Analysis (RCFA) methodology is a continuous improvement tool for your organizational asset strategy. It provides a holistic approach to asset failure management when used together with other reliability processes such as RCM and Reliability-Centred Design™.

Whereas RCM is applied proactively (before the failure occurs) and delivers the best proactive failure management strategy for all types of assets (within specific Operating Contexts), RCFA is applied reactively (after the failure has happened) to allow reliability engineers the ability to maximize equipment availability and improve asset performance.

The combination of RCFA and RCM is especially effective: improving resource planning, forecasting as well as the implementation of effective corrective measures. By joining forces with other risk-based approaches − RCD and RCM3™ − RCFA empowers businesses to diagnose and resolve risks and threats quickly and easily.



# FAILURE MODES, EFFECTS AND CRITICALITY ANALYSIS (FMECA)

Even if your organization has an asset maintenance program to help increase productivity and optimize your assets, a shortage of expertise in the area of asset failure could send your critical risks spiraling out of control.

With Aladon's expertise in FMECA, we can help you identify potential failure modes for a product or process, assess the risk associated with those failure modes, and carry out corrective measures to address the most critical issues.

The FMECA process is an effective tool for improving designs for products and processes—resulting not only in higher reliability, and better quality, but also increased safety, enhanced customer satisfaction and reduced costs.

FMECA can also be used to establish the need for maintenance programs (for maintainable items) and contribute to quality assurance procedures. It provides a knowledge base of failure modes (causes and mechanisms) and their associated corrective action information that is useful for future training, troubleshooting, Root Cause Failure Analysis, and RCM based maintenance programs.

FMECA is not a specific ISO requirement; however, it does satisfy the definition of Preventive Action as defined in both ISO 9001 and ISO 55000. FMECA is also not a specific requirement of ISO 31000, but it does satisfy the criteria by providing a process for managing risk.

# CONDITION ASSESSMENT (CA)

MITIGATE RISK. OBTAIN THE MOST VALUE FROM YOUR ASSETS.

Condition Assessment (CA) is a key tool for helping organizations discover important information to optimize plant operation and maintenance and further improve the quality of RCM analysis and its outcomes.

Using CA, your organization can greatly improve your ability to make knowledgeable, fact-based decisions for preserving assets (through maintenance), renewing assets (through replacement), or upgrading those assets for longer life (refurbishment).

Condition Assessment can determine if it will be possible to "fix the problem" (ensure the function and performance standards are met as determined by RCM). If it doesn't, then the remedy might require asset replacement or refurbishment.



# THE RIGHT RELIABILITY TRAINING FOR YOUR NEEDS

With Aladon, you'll never have to worry about receiving the right level of training to enhance your company's asset reliability program. We can train any employee regardless of past experience and take them from beginner to expert level in a controlled, coached environment.

Our programs help your company target your improvement efforts and select the risk appropriate strategy to bridge your asset performance issues.

We offer a series of hands-on training courses filled with practical ideas, techniques and real-world scenarios.

No matter what your company's current level of reliability knowledge is, these training and development courses can help your maintenance and operations teams understand how to focus their improvement efforts and develop a culture of asset management.

- Executive Overview for all our methodologies
- Introductory Course in all our methodologies
- Facilitator Course for RCM, RCFA and RCS
- Certification Program for Aladon RCM Facilitator
- Overview course in Principles of Physical Asset Management
- Practitioner Certification Program

#### At Aladon

WE TRANSFORM THE WAY YOU DO BUSINESS.

IMAGINE AN ORGANIZATION WHERE THERE ARE NO SURPRISES. NO RUSH TO MAKE DECISIONS. NO EMPTY POCKETS FOR NECESSARY MAINTENANCE. WHERE EVERY DECISION IS EVIDENCE-BASED, AND WHEN AN INSPECTOR WALKS IN THE DOOR, YOU CAN SAY, "WELCOME."

We want you to fully understand what can go wrong at your organization and still fall asleep at night. We help you build a reliability culture so that everyone involved with asset maintenance and decision making has a line of vision all the way down.

To understand what reliability means to all of us, imagine what it's like when you are flying overseas across the ocean. After a meal and wine, the flight attendants dim the lights, and you pop in some earplugs with hopes of getting a few hours of sleep. You drift away, fully aware of what will happen to you if something goes wrong with the plane while you're sleeping. And yet, you're still quite happy to be able to get some shut-eye.

That is reliability.

