



Industrial Press, Inc. | NEWSLETTER

Focus on Maintenance and Reliability

A WORD FROM OUR EDITOR

In 2019, Industrial Press will continue to provide cutting-edge authoritative resources for maintenance and reliability professionals. This issue focuses on two such books—*RCM3: Risk-Based Reliability Centered Maintenance* and *The Reliability Excellence Workbook*. Each practical resource, written by a leading industry professional, offers valuable and critical information to help you achieve M&R success. Learn more about these books from the “Q&As” with our experts. We hope you enjoy this newsletter, and, as always, look forward to hearing your comments. - **Judy Bass, Editorial Director**



Reaching New Heights in Physical Asset Management



A conversation with author and leading risk-based and asset reliability expert, Marius Basson, President of Aladon and The Aladon Network.

IP: *You come from a professional engineering background. What drove you to pursue a career in implementing business improvement and reliability initiatives?*

Basson: When I started in engineering, I worked as a design engineer, designing military and heavy mining equipment. I quickly realized that there is a big delta between what the Original Equipment Manufacturers (OEMs) prescribe and what end-users really need for maintenance and spare parts. I pushed reliability centered design (RCD) and reliability centered maintenance (RCM) in the organization I worked for in order to understand the user requirements better, but was not successful in convincing my

supervisors to adopt the principles. In 1996 I decided to pursue a career in business and reliability consulting where I could implement improvement processes.

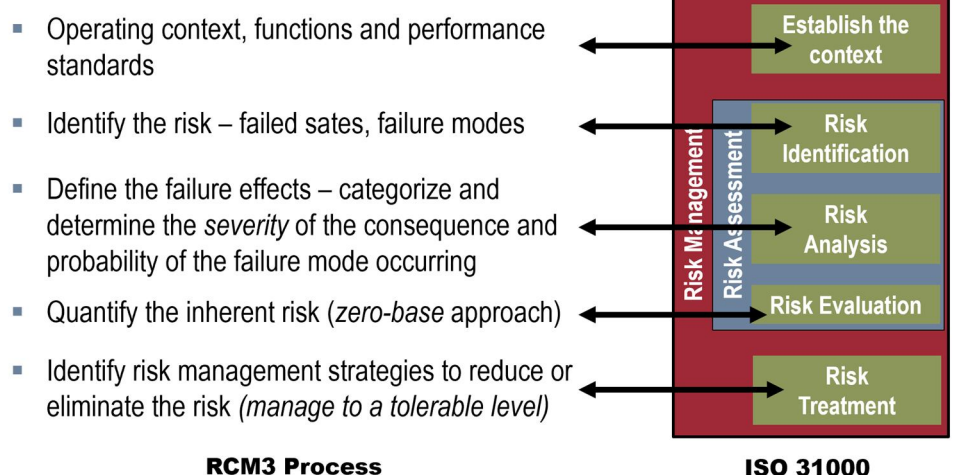
IP: *Currently you serve as the President of Aladon and the Aladon Network. Please explain your involvement in this global community and how it serves asset reliability professionals.*

Basson: The Aladon Network is a global network of industry professionals who all worked in organizations where RCM-based reliability improvement projects were implemented. The Network is a fraternity of reliability specialists who have a passion for the work they do—they are like disciples spreading a belief. The Network members are certified in the delivery and application of the Aladon risk and reliability methodologies. I work closely with the Network members to develop new methodologies or improve on existing methodologies and develop world-class training courses in each methodology.

IP: *Is there anything further you would like to share about your experiences that will help professionals in their daily endeavor to achieve excellence in their own reliability initiatives?*

Basson: Many reliability improvement initiatives exist today—most of them have the same objective in mind. Some achieve the

How RCM3™ aligns with ISO 31000 and supports the management of risk associated with owning and operating assets

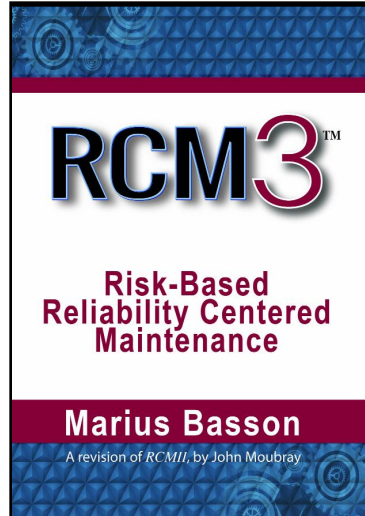


objectives sooner and more effectively, and understanding the intent, the strength, and constraints of these different processes is helpful in selecting the best methodology. A well-documented, repeatable and robust defensible methodology is required for true sustainable results. Additionally, selecting a partner that shares the same vision and passion delivers the results fast. Like safety, reliability is not a commodity, it cannot be bought. Similarly, implementing reliability software alone cannot deliver results.

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IP: *This book was written with a new risk-based focus of RCM3 in mind. What do you want customers to know about your book?*

Basson: I was fortunate to have been trained and mentored by John Moubray, one of the pioneers of the asset reliability and maintenance



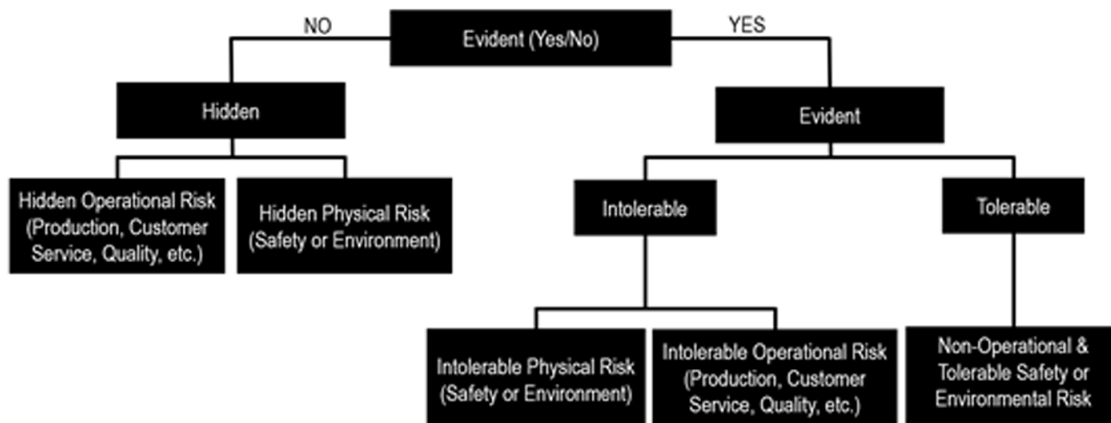
industry. John made a huge impact with his RCMII methodology and the creation of the Aladon Network. For more than 30 years, Aladon has helped customers globally to implement RCMII, and

Moubray's RCMII book sold more than 100,000 copies. RCMII covered the challenges of the Third-Generation Maintenance, but the world of maintenance continues to change. Industry 4.0 brings new challenges, and together with the International Standards for Risk and Physical Asset Management (ISO 31000 and ISO 55000), Fourth-Generation Maintenance requires a new approach and new thinking. The risk-based approach is aligned with the requirements of the international standards and taking maintenance management to a new level of physical asset management. RCM3 places risk management and asset reliability mainstream with organizations' other business processes. ■

RCM3™
RISK-BASED RELIABILITY CENTERED MAINTENANCE

By Marius Basson
Pages: 500, Hardcover
ISBN (print): 978-0-8311-3632-1
Price: \$84.95
ISBN (ebook): 978-0-8311-9485-7
Price: \$67.95

The RCM process categorizes failures into two main categories, evident or hidden failures. Once the RCM team has determined the failure category, the next step is to determine the failure consequence for evident failures and treat all likely failure modes by assessing the failure effects.



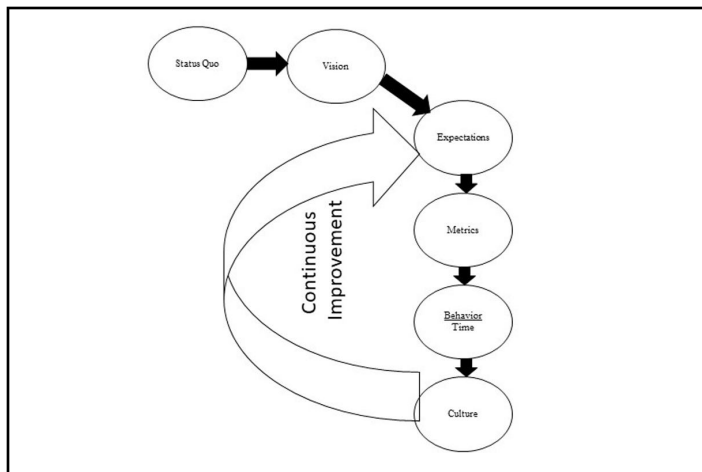
Building a Comprehensive Maintenance & Reliability Strategy



A conversation with seasoned maintenance and reliability consultant and practitioner, John L. Ross, Jr., Ph.D., CMRP.

IP: You have extensive experience in the field and in the plant. What led you to choose your current consulting career path?

Ross: Consulting and engaging in reliability education sparked my interest while doing research for my doctoral dissertation. I developed a thesis that there isn't enough leadership education in the technical fields, even though the companies of the future are going to have a technical core competency. In fact, my thesis was that success is contingent more on leadership than management; yet we aren't developing leaders in technology today. It is a real problem, and one that I think we can attack and be successful in solving.

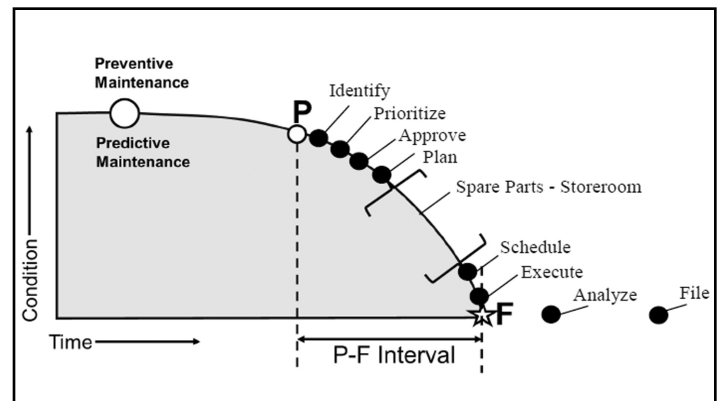


Continuous Improvement

IP: Over the years you've worked on many challenging and interesting projects. What are you working on now?

Ross: I've been very fortunate and thankful in my work with Marshall Institute that they have trusted me with the advancement of the MRO and storeroom segment of their business. I've approached this project with great care and keen interest. In my 33 years working in reliability and maintenance, I can safely say that the storeroom and MRO inventory is the single biggest issue we face, and will continue to face because it is getting harder to source parts. In fact, if there are any electronics or controls on

your new equipment, they will be obsolete before you start the machine. In my work on this subject, I've found that we aren't ready for the spare parts issues that are coming our way. Consider that most storerooms I work with are staffed by one person. Companies are panicking and outsourcing storerooms to third parties; this is a real growth opportunity. I'm working on approaching companies to improve their storerooms, not from a cost savings opportunity, that will come; but rather from a reliability enhancing angle—that's the direction we need to go.



File nodule on the P-F curve

IP: Is there anything further you would like to share about your experiences that will aid M&R professionals in their daily endeavor to achieve excellence in performance?

Ross: I've had the unusual experience of being in on the design and building of a brand new heavy manufacturing facility to set into motion things on the front end. I'd like to promulgate the understanding to my fellow M&R colleagues that equipment has to be designed, built, and installed to be reliable and maintainable in order to be reliable and maintainable. One of our missions in plant maintenance is to guard and ensure the integrity of the inherent reliability of an asset. You can't 'maintain' more reliability into a machine than it has inherently. Do the kinds of things that guard the inherent reliability.

IP: Coined as "Mad Libs™ for maintenance and reliability professionals," what do you want customers to know about your book?

Ross: If we're honest with ourselves, we'd admit that although we are in constant motion, and always working to fix equipment, we don't really have a strategy to get to a level of sustainable asset reliability. I wanted to write a book that 'felt' like we were sitting across the kitchen table from one another, a pot of coffee on the stove and we're just talking about what you 'want' to do, how you want to articulate your passion to get this right. This book delivers that. Together, you and I will walk through the elements of a comprehensive maintenance and reliability strategy, and, in the end, you'll have your words, and your ideas on paper. These concepts outline your intended actions. In a very conversational man-

ner, you fill in the blanks, following my facilitation and examples, to arrive at a master strategy that will actually work for you at your location. Make this the time that you and your team create the plan for the work of the future. ■

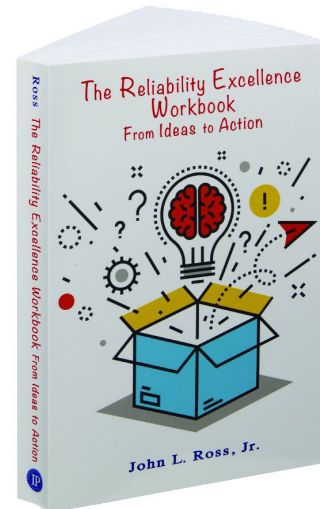
As it relates to Lean Maintenance, much can be gained by out-right elimination of waste, or at least minimizing the waste built into maintenance tasks and work. This has to be done in the spirit of delivering world-class reliability to the production effort, whether in the manufacturing or service industries.

Use the space below to record examples of these forms of waste in your maintenance organization:

Transportation: *moving spare parts from off-site to plant*
 Inventory: *keeping a full compliment of bearings on hand*
 Motion: *removing multi-fastener chainguards*
 Waiting: *for supervisor to sign hot work permit*
 Over Production: *too many PMs*
 Over Processing: *3 forms to fill out to return a part*
 Defects: *in house rebuilds don't last long*

If you find that you're having trouble completing this exercise, ask someone else for their input.

Sample of fill-in-the-blank exercise



THE RELIABILITY EXCELLENCE WORKBOOK **From Ideas to Action**

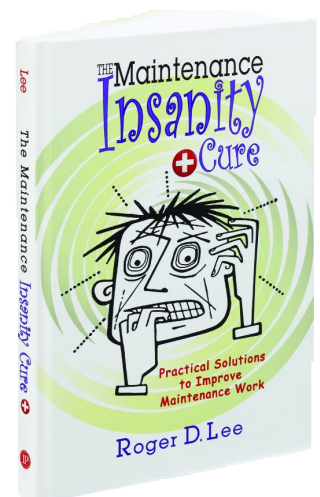
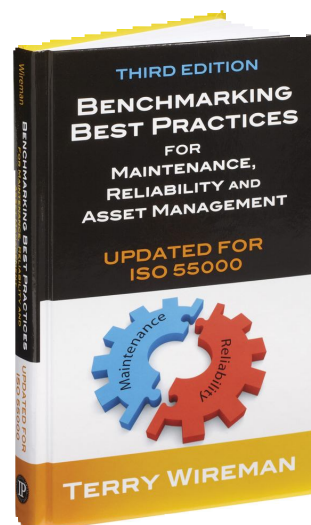
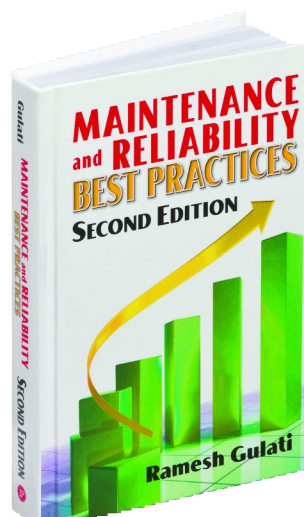
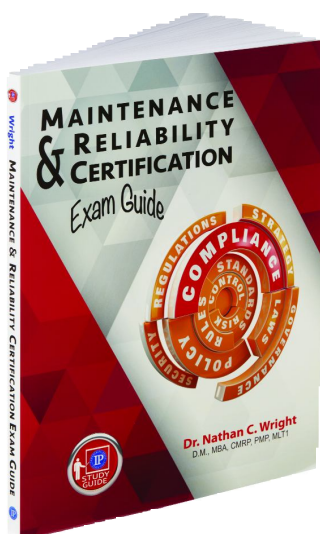
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