## Get on Board!

**Move from Repair Focused to Reliability Focused**

# Reliability Centered Maintenance 2008 Managers' Forum

&

# Enterprise Asset Management 2008 Summit

March 18-20, 2008
Las Vegas, Nevada

## New for 2008!

# MTrain 2008

Maintenance Training Conference

presented by

RELIABILITY™ WEB.COM

uptime® magazine

# 2 Great Keynotes at RCM/EAM/ MTrain 2008

## The ABC's Of Failure – Getting Rid Of The Noise In Your System *by Winston Ledet*

As part of the process of gathering, analyzing and condensing data from manufacturing sites around the world over the last 20 years of our work, it became apparent that it could all be simplified into ABC. Aging of equipment, Basic wear and tear and Careless work habits account for all of the production losses and equipment down time experienced by industry. There are very simple ways to address the ABC's. Unfortunately the Planned Domain, pursued by most industries in the Western World will not get organizations to the goal they are trying to achieve since it is an unstable state of existence. Achieving a high degree of Planned and Scheduled work is a consequence of working correctly not the goal for which we should aim. In order to achieve Best in Class performance a site needs to be able to get rid of 40% of the existing work. The work that must be eliminated is the unplanned and unscheduled work that continually keeps you in the Reactive Domain. You must eliminate the "noise" in your system if you expect to make a real and sustainable change.

## Return on Asset Reliability *by John Schultz*

Improvements in reliability must be aligned with the overall goals of the company and stakeholders. More importantly - they must make business sense. Reliability expert John Schultz shares his experience from working with both public and private corporations to explain the direct connection between reliability improvements and the company financial statement.

# The Value of History

Reliability Centered Maintenance (RCM) arrived as a modern maintenance philosophy in late 1978 and began to hit its stride in the early 1990's to develop more effective maintenance programs that actually focused on preserving system function – and minimizing the effects of failures.

At the same time, PC's or personal computer use became more widespread, software programs to manage; plan and track maintenance work began to emerge.

The ability to design an effective maintenance program and then enter it into a system to manage the new maintenance plan and track failures combined to lift some early adopter programs into a "world class" status.

World class maintenance programs learned that Reliability Centered Maintenance (RCM) replaced costly and ineffective reactive and time based activities that often created as many failures as they were intended to eliminate. Enterprise asset management (or computerized maintenance management) programs tracked labor, material - and equally as important – tracked failures that could be eliminated by the "living program" spawned by most RCM approaches.

At RCM-2008 you will learn to create an effective maintenance program for your critical systems or your entire plant and facility. At EAM 2008 – you will learn to use software to automate your maintenance process, plan more effectively and track the effectiveness of your work. These two conferences work well together to create a seamless system for creating reliability and managing physical assets at your company or organization.

As the maintenance and reliability professional community ages, we have noted a looming shortage of knowledgeable and skilled workers that can sustain the gains made by effective use of RCM and EAM. To begin to address solutions, we have created MTrain 2008, new for 2008 to combine case studies from leaders who are already creating advanced strategies to keep their workforce operating at the highest possible level and keep their organizations competitive in the 21st century.

Understanding the history of the maintenance and reliability professional community as well as understanding the history of maintenance and reliability at your company can provide guideposts forward as we continue to evolve the discipline required to be "world class" in today's flat world and efficient global supply chain.

We are so confident that you will gain from attending RCM-2008 – EAM-2008 and MTRain-2008 - we offer the industry's best "100% satisfaction" guarantee – if you are not satisfied with your 3 day conference experience – simply let us know why and we will refund your entire conference fee.

We hope you will join us to build a "Culture of Reliability" and to transform the world of maintenance and reliability – one program at a time. Please make plans to attend while early bird and hotel discounts save you money on what is sure to be one of the best events of the year.

See you in Las Vegas.

Best regards,

*Terrence O'Hanlon*, CMRP
Publisher
Uptime Magazine®
Reliabilityweb.com

please call 1-888-575-1245 or 305-735-3746 with any questions

# Designed with Your Needs in Mind

According to our research, "best in class" companies use advanced, proactive strategies such as Reliability Centered Maintenance (RCM) to create effective maintenance programs. They use Enterprise Asset Management (EAM) systems to manage the maintenance work process and share information with stakeholders across the enterprise. They view money spent on training and improvements as a solid investment with great business returns. The laggards have the opposite view of investment in maintenance and reliability improvements and practice time based "reactive maintenance" which drives cost up and performance down.

To learn how to move from a reactive maintenance program to a proactive reliability program, please join us for 3 focused events that leverage advanced techniques, strategies and technologies to prepare your company for the competitive "flat world" as efficient and effective global organizations play to win in 21st century business.

- Learn how to create a Reliability Centered Maintenance program
- Learn advanced RCM Techniques
- Hear RCM Case Studies
- Learn how to (re)Implement an effective EAM system
- Learn how to make SAP-PM more effective for managing maintenance
- Learn how to create an effective maintenance training program
- Learn to manage change
- Learn about human reliability
- Learn to eliminate the effects of failures
- Move from a repair focused culture to a reliability focused culture

## Attend RCM-2008/EAM-2008/ MTrain-2008 Risk Free – with our 100% Money-Back Guarantee!

We are sure that RCM-2008, EAM-2008 and MTrain-2008 will be worth the time you invest in attending. If for any reason you are dissatisfied with your experience at this conference, we will refund 100% of your paid registration fee.

for more info or to register visit us online - www.maintenanceconference.com

## Reliability Focused SAP Plant Maintenance Strategy Sessions & Learning Zone

If you are a Maintenance and Reliability professional utilizing SAP PM for Plant Maintenance, you will learn how to make it work better at EAM-2008. This is the only independent reliability focused event with a dedicated SAP PM Strategy Sessions & Learning Zone. This new feature includes a full day reliability focused SAP Plant Maintenance workshop, 7 SAP PM User case studies and a live SAP PM Learning Lab led by the experts from Ivara who have helped hundreds of clients develop technically-based maintenance plans in SAP-Plant Maintenance.

This is your opportunity to network with colleagues from asset-intensive organizations that are leading the way with successful Asset Performance and Reliability projects supported by Ivara EXP Enterprise - the industry's leading asset performance software. These projects have generated millions of dollars in profit for their companies and provided a better way of life for the people working together in asset care - operations, maintenance and reliability engineering.

Attend this track to take advantage and gain hands-on experience with Ivara EXP Enterprise (in the SAP Learning Lab) that is fully integrated (and Certified Netweaver Compliant) with SAP PM.

**March 18th-20th**

**All Day Learning Lab – Get it Done!**
Achieve Successful Plant Maintenance with SAP PM and Ivara EXP.

Test drive the only complete end-to-end asset performance management solution that is fully integrated with SAP PM and provides tools your organization needs to achieve operational excellence.

Experience hands-on a new way of caring for assets, in particular, utilizing an asset health dashboard to monitor the condition of equipment and keep them reliable. See how the Powered by Netweaver Certified Integration between SAP PM / Ivara EXP can make a difference in your company to manage the performance and reliability of your equipment.

# RCM Learning Zone 1

**7 Questions of RCM** by Doug Plucknette and Bill Keeter, Allied Reliability

This short course provides a simple explanation for each of the 7 questions asked in an RCM Analysis. Sit in on this course if you are new to Reliability Centered Maintenance.

**Implementing RCM Globally at HOLCIM Cement**, by Hans Burger and Steve Lindborg, Holcim, Germany

This presentation discusses the unique challenges of leading an RCM effort in over 74 countries at Holcim Ltd., a leading cement manufacturer. Both the learning and successes will be presented.

**Using RCM to Build a Reliability Culture at Lockheed Martin** by Rich Robertson, CMRP and Mark Witkowski, CMRP, Lockheed Martin

This presentation will discuss tools and methods used and successes in instilling a reliability culture over a 5 year period at Lockheed Martin in Sunnyvale, CA. The 5.5 M square foot facility is comprised of manufacturing, satellite and missile test and engineering buildings on 450 acres.

**Reliability Case Study of Analysis of Bottle Packaging Line** by Dan Might, Coors and Loyd Hamilton, Think Reliability

This presentation covers a method for graphical organization of micro & macro-stop shutdowns for evaluation of reliability improvements. The discussion centers around the use of the models, the graphical elements, and the structure used to approach issues.

**Why Equipment Fails** by Henry Ellmann, the Aladon Network. Argentina

To understand why equipment fails and why therefore maintenance is an unavoidable function, it is important to understand the physical reason why equipment fails at all. This presentation recaps the second law of thermodynamics: Energy tends to flow spontaneously from being concentrated in one place to becoming diffused and spread out. The key to cost-effective avoidance of this failed state is to identify the phenomena that could put the system into such failed state. This will make it possible to identify suitable failure management policies.

**RCM for Problem Solving**
by Wayne Vaughn, Harley Davidson

The disciplined process of Reliability Centered Maintenance can be useful in solving all types of problems, even those outside the maintenance realm. This presentation explores several examples from Harley Davidson.

**Implementing RCM based Maintenance in a large, diverse, international Conglomerate – United Technologies Corporation** by Robert Latham, UTC and Dennis Belanger, MRG

UTC is a massive company with extensive, global operations in a wide range of military, government and commercial businesses such as Pratt & Whitney, Carrier Corp, Otis Elevator and Sikorsky with manufacturing sites all over the world. Making a cultural change in this type of environment has its challenges. This presentation will discuss how UTC has approached that challenge. We will present specific examples of implementation work currently in progress and their plan and approach for expanding RCM driven reliability practices throughout the company.

# RCM Learning Zone 2

**Using the RCM Project Managers Guide** by Jack Nicholas Jr.

The short course details the RCM Project Managers Guide, formerly known as the RCM Scorecard. It will address "readiness to conduct an RCM project," "pitfalls to avoid during execution of an RCM project" and "RCM project success factors" along other guidelines useful to prospective project managers, their supervisors and champions.

**RCM for Medical Devices** by Phill Thorburn, Biomedical Engineering Department, Royal Adelaide Hospital, Australia

Over the past 2 years, Biomedical Engineering Department (BME) at the Royal Adelaide Hospital (RAH) has been exploring the advantages of utilizing RCM methodologies for developing its maintenance strategies for the hospital's medical assets. While there are significant improvements to be gained in the performance of medical devices from the application of RCM, there are also a number of barriers, some considerable, to be overcome by any biomedical or clinical engineering department wishing to implement RCM and avail their institutions of the benefits.

**RCM of Oil Immersed Transformers: A Work Group Approach from Several Companies** by Iony Patriota de Siqueira, CHESF - Brazil

This paper reports the result of application of RCM to oil immersed transformers, with the participation of experts from several companies, from utilities, manufacturers, consultants, laboratories and universities. The importance and complexity of transformers to power systems, has motivated its choice as a pilot project from a Cigré-Brazil joint working group sponsored by Subcommittees B3 (Substation), B5 (Protection) and A2 (Transformers). It was the intent of the group to demonstrate and document the viability of applying RCM to equipment of this complexity.

**Delivering Results through Classical Reliability-Centered Maintenance: A U.S. Postal Service Case Study** by Ray Darragh, USPS, Mac Smith, AMS Associates, Nick Jize, JMS Software

The U.S. Postal Service (USPS) processed over 213 billion pieces of mail in 2006. To efficiently handle this ever increasing load, a large number of automatic systems have been introduced throughout its distribution centers over the past several years. One machine, the Automated Flats Sorting Machine 100 (AFSM 100) began development in 1999 to process the growing volume of "flats" mail - 29 billion

in 2006. This paper will describe the AFSM 100 RCM analysis performed at the Maintenance Technical Support Center (MTSC) in Norman, OK, and its implementation that was conducted on machines at a processing facility in Phoenix, Arizona.

### The Need for Implementation Frameworks and Their Value in RCM Initiatives by Anthony McNeeney, RMG

In order to achieve culture change and buy-in across several disciplines, asset reliability improvement initiatives Johnson Controls Inc (JCI) developed a strong conceptual framework called Business Directed Maintenance (BDM) which captures the structure, objectives and rational for a path forward at client sites. This short course outlines some of the features of the BDM framework and illustrates the value of the framework in structuring new technologies and new processes.

### Combining RCM2 with Asset Performance Software to Increase Equipment Utilization by Mike Schultz, Dofasco ArcelorMittal

This session will demonstrate how North America's leading steel solutions provider, Dofasco ArcelorMittal, combined the powerful analysis capabilities of RCM2 with the latest in asset performance software to increase asset utilization rates at its Central Shipping operations. Attend this session and understand how Dofasco's Central Shipping department surpassed its 96% stacker crane utilization target, achieving 98% utilization rate.

### Classical RCM Application to a New 30 Ton Overhead Bridge Crane at Lockheed Martin by Terry Spychalski and Terry Finnegan - Lockheed Martin Space Systems

Lockheed Martin has embarked on a comprehensive review of the risk associated with the manufacture, handling and transportation of the Space System's Company's products. One of the many projects that are on-going involves an evaluation of the risks with its Facilities. This paper addresses a recent in-depth study using the Classical RCM process to improve the focus of its Preventive Maintenance tasks as a key element of crane risk reduction.

# MTrain Learning Zone 3

### The Changing Roll of the Craftsperson in Industry by Chuck Kooistra, CMRP, GP

One of the most pressing issues facing most companies is the lack of qualified technical labor. A shortfall of maintenance engineers and technicians is having a significant impact on North American manufacturing. The old paradigms of how we recruit, train and retain our craftspeople no longer hold true. This short course will discuss changes that we need to make in recruiting, selecting and training of maintenance personnel. It will also examine how the craftperson's role needs to change in respect to reliability and routine equipment care.

### Understanding Human Reliability by Derek Burley, Cargill

As experience grows in using RCM to improve maintenance performance, it has become evident that a significant proportion of failure modes are related to human error. In order to effectively manage these failure modes it is important to gain an understanding of how and why human errors occur. Human beings all make mistakes. Within society this is generally perceived as a bad thing, something to be punished for by allocating blame and sometimes shame to one individual or group. This presentation challenges that position and will present an introduction to understanding and managing human error within the RCM process.

### Utilizing Knowledge-Based Maintenance for Operation and Maintenance Activities by Eng. Sultan AL Khuraissi, PMP, Royal Commission for Jubail, Saudi Arabia

Critical issues in operation and maintenance projects in Saudi Arabia are of the application of knowledge and experience on different projects, and the prevention of this knowledge and experience from leaving the country. However, knowledge management (KM) plays a vital role in utilizing project and individual knowledge within organizations. The present study presents a knowledge-based maintenance (KBM) software program that is developed to utilize the knowledge management approach on maintenance projects. This study will describe software functions, processes, potential benefits and limitations and implementation. The feasibility and potential benefits of using maintenance knowledge and best practice through optimization of a practical, knowledge-based maintenance software system will be discussed.

### The Development of a Local and Distance Delivered Reliability and Maintainability Engineering Masters Degree Program by Wes Hines, University of Tennessee

This presentation will present the development of a MS degree program in Reliability and Maintainability Engineering. It will describe surveys developed to measure the industrial demand and curricular content, procedures necessary to get such a degree approved, implementation issues, and their outcomes. The technology used to deliver the courses at a distance will be presented and demonstrated. Lastly, an overview of the curricular content will be given.

### Developing a Pay for Skills Program by Pete Little, MPACT Learning Center

This short course explores a pay-for-skills training program for maintenance technicians. As companies add more automation, technicians were not equipped to deal with the increasingly complex and sophisticated equipment that was literally pouring into the company. This presentation also considers how to develop a multi-craft curriculum and discusses policies to cover program entrance requirements; handling of existing personnel, new hires [experienced], and new hires [inexperienced]; pay scales; testing procedures and passing grade levels; minimum and maximum times-in-grade; minimum acceptable achievement levels to remain in the program; disposition of failures; performance reviews procedures; an implementation plan; and recommended self-study materials to complement the hands-on education.

# EAM Learning Zone 4

**Certification and Reliability** by Ramesh Gulati, CMRP, ATA, Arnold Air Force Base

One of the key ingredients in successfully implementing best practices in maintenance and reliability is the skill of work force. Do they possess the right skill sets? Have we trained them right? Are we doing the right-appropriate training?

How do we measure skill sets and training effectiveness? In this presentation, we will discuss, how we dealt with these issues and how certification from SMRP has helped us to build maintenance and reliability skills in our workforce and supported the creation of a reliability culture.

**Canada's Maintenance Management Professional Certification Program** by Norm Clegg, PEMAC

The Maintenance Management Professional (MMP) certification program was developed to meet a need in Canada for formal training in maintenance, engineering and physical asset management of people aspiring to management or specialist positions in the profession. Eight modules cover the topic field. Completion is recognized in some Provinces with a certification on trade papers (Alberta Blue Seal) and (Ontario Ministry of the Environment CEU's).

This paper outlines the program, its content, operation, learning elements and outcomes and, suggests its continued wider adoption internationally.

**Remediation of CMMS Data is Essential to support RCM** by Scott Weston, CMRP, Global Knowledge Management

Remediation is the process of auditing and correcting asset data and documentation utilized by a Computerized Maintenance Management System. If a company wants to continuously improve reliability efforts, remediation must be performed periodically to ensure the accuracy of its data. The benefits of remediation include: 1) increased equipment data accuracy, 2) increased maintenance efficiency and 3) reduced total operating costs. Without remediation, many companies run the risk of inaccurate long-term trending, making financial decisions on bad data, and potential regulatory compliance issues.

**Managing Continuous Improvement at Seattle Tacoma Intl Airport** by Jennifer Mims, Port Authority of Seattle

This presentation explores the Aviation Maintenance at Seattle Tacoma International Airport department continuous improvement effort; referred to as AIMS (Aviation Inventory and Maintenance Systems), focused on how to better and more efficiently maintain the equipment, systems and facilities. AIMS is focused on the meaningful integration of systems (technology and processes), data/metrics, and people. The AIMS Program has three primary initiatives: materials management, work management, and asset management, with two supporting initiatives focused on the development and implementation of standardized operating procedures (SOPs) and Key Performance Indicators (KPIs). Two integral components to our continuous improvement efforts are the use of our Computerized Maintenance Management System (MAXIMO®) and our comprehensive training program focused on the changes we are effecting, in conjunction with technology and processes.

**Getting A Grip on Maintenance Performance** by Remco Jonker, Mainnovation

Within controlling the maintenance process, a good EAM system is indispensable. Many people enter data about the maintenance of their assets on a daily basis, such as consulting the object history and knowing if spare parts arrive on time in the warehouse. However managing a lot of data does not consequently lead to the right steering information and analyses. A very clear vision on priorities within the maintenance process is needed for this. Learn how Value Driven Maintenance® poses a clear relationship between working processes within a maintenance surrounding and the contribution which these processes deliver to the value creation of the company. Learn how to set up a management dashboard with Key Performance Indicators (KPI's) in your EAM system and how benchmarking can be used to determine norms for these KPI's. The KPI's focus on different areas, like Reliability, Cost Control, Work order handling, Inventory, etc. Learn how to use your own data to make reliable forecasts, to make value enhancing decisions and to provide you with a daily summary of the economic consequences of your decisions. Fast, convenient, easy and a conscious step towards continuous improvement.

**Information Driven Reliability Centered Maintenance** by Stephen Slade, Oracle Corp

Successful firms find that utilizing available information and technology is key to reliability. In the past, 'run-to-failure' was a common occurrence, but with remote sensoring and higher quality materials now available, firms are becoming more sophisticated with their service, maintenance and operating models. Running in the 'sweet-spot' is a term often heard in operating circles from the shop-floor to the top floor, from NASCAR to Utilities.

By better utilizing available information in conjunction with the technology on the market today, firms can find better ways to run their business. This session will focus on live examples and the accompanying products available to support these initiatives.

**Capturing the Knowledge of an Aging Workforce** by Paul Dufresne, Trico

It is estimated that the average age of the workforce in North America is between 55-57 years old. As Baby Boomers retire and with the lack of apprenticeship programs in most facilities how do we capture the knowledge and know how of these retiring tradesmen? This presentation will discuss in detail the process of how one facility captured the critical information prior to and even after the departure of their oiler with over forty years of experience. This presentation will show the steps used in gathering the information and development of work task outlines for the development of a documented lubrication program.

**Implementing CMMS? Let me tell you what I have learned** by Steve Mislan, Charleston Water System

The presentation begins with my experience with a CMMS that had been in use for sev-

# EAM Learning Zone 5

**IPSED: Back to Basics** by Dave Abecunas, CMRP, Signum Group

Many modern maintenance approaches today focus a lot of attention to technology and organizational management. But, have we forgotten the basics? Have our maintenance departments started to fall back on basic work practices in pursuit of high technology and complex work processes? Any maintenance organization needs to maintain proficiency in Identifying, Planning, Scheduling, Executing and Documenting work - IPSED.

**The Benefits of an Integrated Reliability Strategy driven by RCM** by Tim Penny, Graphics Packaging and Dennis Belanger, MRG

GPI is in the early stages of implementing an integrated reliability initiative that include expanded utilization of their EAM, standardization and expansion of best practices for reliability and maintenance. At the core of this effort is the extensive use of RCM and FMEA analysis to properly identify maintenance tasking. This presentation will highlight the approach they are using, the successes and results they have seen, stumbling blocks, lessons learned and future plans.

**Operations Assurance (OA) Project for Chevron's Agbami Floating Production Storage and Offloading (FPSO) Facility** by Fatih Yeter, CMRP, Preops Integrated Solutions

This session will discuss CMMS (JDE 8.11) data development, High Level Systems and Equipment Criticality Ranking, RCM Study, and Vendor Recommended Spare Parts evaluations that we have developed within Agbami Operations Assurance (OA) Project for Chevron's Agbami Floating Production Storage and Offloading (FPSO) which is a new design and construction Oil & Gas Production Facility to be commissioned offshore Nigeria. The FPSO contains approximately 90 integrated Production and Marine systems with the production capacity of 250,000 BOPD and storage capacity of 2 M barrels.

**Motor Asset Management from Cradle to Grave** by Noah Bethel, PdMA

This presentation will discuss methods of optimizing the motor management and maintenance effort through software applications utilizing state of the art scheduling and tracking features. We will demonstrate the effectiveness of tracking a motor asset from cradle to grave including initial receipt and quality control, predictive testing and trending, multiple repairs, and installation into different applications.

**Condition-Based Maintenance (CBM) Using Continuous Monitoring: Developments and Examples** by Wayne Stargardt, Aleier, Inc.

Predictive maintenance (PdM) can be more cost effective than conventional preventive maintenance, but the cost of acquiring operating data has limited its application to only more expensive or critical equipment. New developments in wireless technologies have lowered costs for gathering data to perform PdM on a broader range of equipment. Continuous, automatic monitoring by the CMMS can extend CBM strategies to more equipment and improve the performance of corrective maintenance. This presentation reviews recent developments in wireless technologies, describes typical costs and integration of data with a CMMS, and how the CMMS can utilize. Finally, the presentation will profile examples in which wireless monitoring is improving maintenance operations.

**Managing Reliability Information Across the Corporation** by Forrest Pardue, 24/7

This paper will discuss how two major food & beverage corporations use an Internet-based communication service to create consistent operations and information flow in condition monitoring activities at their different plant sites, even when outside contractors are providing monitoring services. Some of the key issues discussed are:

- Common syntax across plants for defining critical equipment
- Common fault definitions across technologies & plants
- Managing frequency & completion of monitoring tasks
- Standardizing reporting & metrics of reliability progress across the corporation
- Role of Internet-based communications in creating consistent corporate accountability for reliability improvement

**Designing Asset Management Software for Maximized Usability/Productivity in Close Cooperation with the Industry Itself** by Anders Lif, IFS

In this presentation we will look at how the use of Human Computer Interaction (HCI) research and close cooperation with user groups from the asset intensive industry completely changed the way business applications were built when designed for user productivity instead of just trying to fulfill a certain functional task. In this session we will share experiences in the Nordic pulp & paper industry and also look at some design principles that changed the business application world for these people when re-designing an OEE application for optimized user productivity.

**Roadmap to successful Maintenance Management System Implementation** by Jim Caldwell, GE Aviation Supply Chain

This presentation attempts to disclose the bumps in the road most are likely to experience when trying to implement a full EAM/CMMS system. This session will cover ideas to choose the best system, proper ground work to import data, implementation, training, super users, EAM/CMMS data in daily operation and Overall Equipment Effectiveness (OEE).

eral years without consistent Work Order Types, Naming Conventions, Craft Assignments, Scheduling and Job/Labor Estimations and how we created a new culture that appreciated the importance of accurate information for better management decisions.

The second part of the presentation focused on practical examples and methods for ensuring data integration and more importantly, management support. Using examples from various industries and experts, I will emphasize the need for research and prioritizing especially when constructing equipment and asset tables. We will explore how coding can streamline reports and projections, the importance of Inventory and Vendor information and finally, how to anticipate the changing goals and expectations of management and supervisors.

# SAP Plant Maintenance (EAM) Track

sponsored by IVARA WORK SMART

## Asset Performance Management in an SAP World – an Integrated and Cohesive Strategy

by Eric Wegscheider & James Nesbitt, Ivara Corporation

This session will outline an integrated and cohesive approach to asset performance management for companies using SAP PM. Optimizing RCM with SAP PM alone is not enough to implement and sustain equipment performance and reliability. By bringing together RCM\FMEA, Condition Monitoring, statistical analysis and process discipline seamlessly to SAP PM, organizations can quickly and effectively implement a proactive asset reliability strategy to achieve a holistic view of asset health.

Leading RCM tools have coupled RCM with SAP PM. These solutions have proven to be an effective way to identify all the tasks required to ensure the performance of your equipment (on condition, failure finding, scheduled restorations, corrective, redesigns and run to failure). Learn about the latest technology to implement RCM and sustain reliability and performance levels – with no surprises.

## SAP PM in Your Future? – How to Plan for Success & Ensure Your Asset Performance & Reliability is Maximized

by Mike Schultz, Reliability Specialist, Dofasco ArcelorMittal

Dofasco is a world-class, leading steel manufacturer and a benchmark for asset reliability best practices. Now part of ArcelorMittal with over 50 plants worldwide, Dofasco is leading the way in equipment reliability, demonstrating how equipment reliability is a key enabler of the company's Manufacturing Process Reliability strategy - which ensures its manufacturing process consistently delivers the production required by its business plan. Results on just one business unit delivered a 14% improvement in asset utilization and an increase of 5600 tons of output per month.

With SAP PM being considered company-wide, Dofasco Reliability Specialists asked themselves the question "Does it matter to our reliability strategy that we are moving to SAP PM?" What needs to change? How will we sustain the asset performance and reliability levels if and when we implement SAP PM? Find out the answers from the people that set the benchmark for reliability and maintenance best practices.

## Integrating 35 Different Equipment Reliability and Condition Data Sources with SAP PM

by Darryl Barney, Manager, Reliability Engineering, San Onofre Nuclear Generating Station (SONGS) and James Nesbitt, Ivara

If your challenge is managing the islands of data that exist in your plant to monitor the condition and reliability of your equipment, fear not. In this session, learn how SONGS was able to seamlessly integrate over 35 difference data sources, eliminate mindless manual calculations, save time and money. Understand how SONGS manages maintenance and reliability work 'on exception' with the right tools in place.

## Rapid ROI Approach to a Multi-Site Reliability Improvement Strategy

by John Keller, Manager of Maintenance Engineering, Peabody Energy

Learn how Peabody Energy's Powder River Coal Mining Division is implementing a reliability improvement methodology simultaneously across 3 coal mines in the Powder River Basin, Wyoming (including the largest coal mine in North America). Peabody is using a 'templating' approach by leveraging an accelerated FMEA approach called Maintenance Task Analysis at the component and major asset level to achieve a rapid ROI. Attend and gain valuable insight on how this coal industry leader is making the most out of their SAP PM investment by adopting reliability as a business strategy.

## SAP Managing Calibrations

by Craig Read, Sappi, South Africa

This presentation discusses using SAP4.6 to incorporate our ISO14000 and ISO9000 instrument calibration requirements. These were previously not included in our CMMS due to the complexity of the calibration certificates required by our ISO standards. As SAP was chosen as a company standard for managing all maintenance work, we embarked on a project to include all Calibration work orders and certificates within the PM/QM modules of SAP, even though there are many software packages which handle instrument calibrations far easier.

## People – Managing Through the Hardest Part of Implementing a Reliability Program Utilizing SAP PM

by Ryan Sletmoen, Catalyst Paper

With billions invested in its four mills, improving performance is critical to Catalyst Paper's long-term profitability. Catalyst, a leading pulp and paper company, embarked on improving the reliability and performance of their mills, and produce more sustainable financial results. This session will detail how Catalyst complimented SAP PM with the leading asset performance management software, Ivara EXP Enterprise, to increase paper machine efficiency. Hear about the Catalyst core team and how they were instrumental in securing internal support for the initiative; fostered collaboration among maintenance and operations and carefully managed the change involved in transitioning to a reliability-based culture.

## Open Panel Discussion: SAP PM and Reliability, What's Next?

by Marius Bassoon, New Dimension Solutions, Henry Ellmann, Ellmann, Sueiro & Associates, James Nesbitt, Ivara, Mike Schultz, Dofasco ArcelorMittal, John Keller, Peabody Energy, and Darryl Barney, SONGS

Bring those burning questions that keep you up at night about reliability and asset performance. Leading experts will field your questions on your hot topics! Facilitated by Al Weber, founding chair of the SMRP, this session will see a gathering of renowned experts from many different industries for a lively discussion on hot topics, as directed by the audience. Whether it's the aging workforce that's keeping you awake at night, operational competitiveness, overcoming the challenges of transitioning to proactive, making the most out of your maintenance budget, or simply improving the relationship between maintenance and operations, attend this unique interactive session and learn from the best!

please call 1-888-575-1245 or 305-735-3746 with any questions

# Certificate Workshops

## Tues, March 18th

Enhance your professional standing and your learning experience by registering for pre-conference workshops. RCM/EAM/MTrain-2008 already provides 12 hours toward CMRP and other professional Re-certification. Each workshop is valued at 6 additional hours of credit toward CMRP or CPMM Re-certification. A certificate will be provided for each workshop.

# Workshop #1

## Advancing Reliability and Maintenance

by Jack R. Nicholas, Jr., P.E., CMRP

This is a new workshop greatly expands on the theme of how to be successful applying RCM in any venue. It will be presented by a former practitioner and former commercial supplier of RCM analysis services with over 30 years experience overseeing application of the principles of RCM in military, industrial, utility and government activity applications. He has written extensively on the subject. His company no longer offers RCM analysis services, endorses no specific approach to RCM, Variants or Derivatives and has no financial ties to any organization that does.

This workshop is based on Advancing Reliability and Maintenance. 3rd edition published in December 2007, he and his co-author, R. Keith Young, have taken a neutral-to-positive stance on all approaches to RCM. His intent is to educate prospective users and services providers to take a new look at RCM principles, various approaches available in the marketplace and potential benefits. His presentation describes pitfalls to avoid in order to improve chances for a successful outcome. For the first time, readiness factors to consider before entering into an RCM project are described and discussed. He has developed for presentation in this workshop a logical description, partially based on actual applications, of how RCM fits with other major maintenance and reliability initiatives such as Total Productive Maintenance (TPM), 6 Sigma and Procedure Based Maintenance (PBM). In addition he will present for the first time a Preventive Maintenance Optimization logic that provides a screening tool for assessing current tasks, task periodicity and assignment criteria prior to preparation of procedures for their execution.

**Workshop Outline**

- History of RCM and rationale for its development and evolution in various organizations
- Economic factors and forces that led to the development of RCM Variants and Derivatives, the Society of Automotive and Aerospace Engineers (SAE) RCM Standard and its relationship to the SAE Failure Modes and Effects Analysis Standards
- How RCM methodology fits into broader reliability and maintenance strategies with actual examples of strategy overviews presented
- Descriptions of various approaches to "Classical" RCM, Variants and Derivatives:
  - Classical RCM
  - Super-classical RCM (RCM II)
  - Experienced Based Maintenance
  - Profit Centered Maintenance
  - Risk Focused Maintenance
  - Combinations of the above
  - 80/20 RCM
  - Modified Classical RCM
  - Blitz RCM or RCM Blitz
  - Value Based RCM
  - Streamlined RCM or SRCM
  - PM & PdM Program Conversion and Optimization
- How to link RCM with other maintenance and reliability processes and methodologies including, but not limited to Total Production Maintenance (TPM), Six Sigma, various "maintenance scorecards," and other elements of asset management and assessment
- Avoiding pitfalls in the execution of projects utilizing any of the above approaches and the obligations of both client and services providers to assure success
- Assessing readiness to successfully apply RCM to facilities or vehicles by internal (self)audit of an organization
- Evolution and rationale for metrics to determine whether or not to perform any approach to RCM analysis on a particular asset and, when you decide to do so, metrics to use for three phases of an RCM Project (Analysis, Implementation and Benefits phases)
- Between 60 and 80 metrics will be defined for possible use in various venues
- Results of an RCM Survey conducted by Internet with over 200 participants in early 2005

The Workshop leader during this one day effort will:

- Lead a discussion on why RCM seems to be losing favor or has never been accepted by Maintenance and Reliability professionals in many industries
- Encourage participants to describe their concepts of better or more logical bases for maintenance and reliability programs
- Suggest alternative outcomes that may be possible from the final steps of any RCM method for consideration and discussion by workshop participants
- Suggest for discussion what practitioners who recognize the benefits of RCM can do to improve the end results of any RCM project
- Describe ways of bringing about culture change where needed to achieve buy-in to an RCM-based maintenance and reliability strategy

# Workshop #2 PM Optimization by Steve Turner, OMCS

This workshop is designed to assist maintenance and reliability professionals develop an understanding of alternate paths to the development and implementation of effective maintenance strategies.

The workshop emphasizes the PM Optimization (PMO) methodology, an RCM based approach to maintenance analysis. Whereas RCM was developed for new plant and the design process, PMO was developed specifically to improve the performance of established maintenance operations quickly and effectively utilizing RCM principles.

Rather than starting from scratch and evaluating many failure possibilities, PMO directly focuses on plant and personnel productivity by:

- Eliminating all redundant PM work and task duplication;
- Ensuring that all PM is done at the correct interval by the most effective means;
- Achieving substantial improvements in uptime by moving to a more rational maintenance program based on specific business and production needs;
- Quickly identifying preventable failures and addressing them through PM tasks.
- Forming a close knit relationship amongst those involved in managing the plant at the "grass roots" level, that is, the operators, trades people and other hands-on specialists. A significant strength in the program is its ability to harness the latent knowledge of these people and empower them to "make a difference".
- Focusing on implementation rather than analysis
- Providing a return of up to 5 to 1 or more on labor invested in the program.

By attending this workshop participants will also discover:

- The limitations of both statistical and classical RCM methods ... and how to implement RCM but avoid becoming one of those failure statistics.
- Where to find the quick hits that are so important to gaining momentum.
- How to use software effectively to streamline the analysis and implementation process, record the basis for decisions and to form the basis of a living, continuous improvement program.
- How to engage all those people who are indirectly involved in the maintenance improvement program.

## Establishing a Competency Based Maintenance and Reliability Training Program

by Perry Lovelace and Andy Page

# Workshop #3

When people work together towards a common goal, their interdependencies form a complex system. Analyzing the training and competency of one person without considering his/her effect on the team doesn't describe the effect of that person on the entire system, or team. Competency then, has to be considered at both the team level and individual level. We call this "Organizational Competency" (OC). The ability of a team or an organization to successfully deliver results rests not only with individuals knowing their role and being capable of performing individually, but also on the ability of all individuals involved to work together as a cohesive unit. Many organizations have tried to develop competency systems, and a few have been successful. Based on their experience with several competency programs, the workshop leaders will present tools and examples of what works and also pitfalls to avoid. This workshop will provide the basic building blocks for Organizational Competency, including: · Step-by-step change management process towards OC · Using Bloom's Taxonomy to translate the SMRP Body of Knowledge into Proficiency Reference Guides · Methods of identifying proficiency levels for Job Families and/or Positions · Individual competency assessment and review techniques and strategies · Identifying critical skill gaps for your teams · Creating individual and team development plans using training, OJT, and mentoring to close critical skill gaps.

## Planning and (Re) Implementing An EAM System

by Tim White

# Workshop #4

Enterprise Asset Management implementation is the holistic approach to managing the value of your assets through their life-cycle. Companies all over the world are realizing that EAM systems offer the most effective way to optimize equipment reliability, maximize profit and sharpen efficiency. This workshop teaches an approach that manages all components (financial, operational, maintenance) that impact the life-cycle value of an asset and creates an effective standardized environment with far-reaching benefits. Participants will learn how to create a successful, sustainable EAM implementation with the following benefits:

Increase uptime which will increase output production, Deliver reduced operating costs, Deliver reduced inventory costs through effective supply chain management, Create an efficient environment that will act as a model throughout every department at the enterprise level, Deliver increased asset life and improved asset health

please call 1-888-575-1245 or 305-735-3746 with any questions

# Workshop #5

## Maintenance Planning and Scheduling by Tim Kister

Approximately one third of all companies have a maintenance planner. Less than 10% of those planners are being utilized efficiently. Inefficient use of the planner position produces higher maintenance material costs, increased overtime and an increase in maintenance repair costs.

This workshop provides best practice instruction on the roles and responsibilities of planners and supervisors. Participants work individually and in teams to accomplish the course objectives. Teamwork and communication are emphasized heavily during this training. Participants are encouraged to network and share their personal experiences. Learn How To :

- Understand common maintenance problems, delays and inefficiencies
- Define the nature of repair (reactive) vs. maintaining (proactive)
- Sustain the commitment and support of management
- Apply a maintenance assessment and proactive maintenance time line
- Coordinate the responsibilities of maintenance supervisors and planners

# Workshop #6

## Developing Effective Work Processes and Solid Equipment Reliability Programs for SAP-PM

by Neil Waugh, Marius Basson & Michael Gill

SAP Plant Maintenance (now EAM) is popular maintenance software used my many major companies, yet most struggle to tap into the full potential of this Enterprise Resource Planning (ERP) system. After the initial implementation investment, many maintenance organizations resign themselves to using only the minimal functions needed to "get 'er done".

Join experts from Ivara who have helped hundreds of clients develop technically-based maintenance plans in SAP-Plant Maintenance and other EAMs using an effective Maintenance Task Analysis (MTA) process. Participants will be guided step-by-step through the MTA process from systems identification and risk prioritization to building reliability-based programs to rolling the resulting work plans into the SAP-PM module.
For more critical assets or assets that require a more thorough understanding, this workshop also covers the basics of maintenance work process development using RCM2, a rigorous Reliability Centered Maintenance process developed by reliability pioneer, John Moubray, founder of The Aladon Network.

See the latest technology to determine which failure modes analysis approach is best for an asset and review software tools to enhance SAP-PM in work process development, proactive maintenance planning and performance analytics. If you use SAP Plant Maintenance or EAM or think you will be in the future, this is a "must attend" workshop.

## Win an Alienware Laptop

Each fully paid attendee can be entered into a drawing for a free Alienware laptop computer, one of the most reliable computer systems available. The drawing for this and other great prizes will be held on Thursday afternoon during the closing ceremony.

## Stay Connected

In addition to connecting with new and old friends at RCM-2008, EAM-2008 and MTrain-2008, Reliabilityweb.com and other exhibitors will also be sponsoring a fully functional Internet Café with high speed Internet access to keep you in touch with your email and online travel reservations.

# Bonus Workshops

**Buy a 3 Day Pass and get an extra Bonus Workshop FREE!**
**Choose from 3 popular workshops.**

# Monday, March 17th

## Bonus Workshop #1 Introduction to RCM Blitz

The decision process in Traditional RCM often leads to "No Scheduled maintenance" or "Run to Failure" for failure modes that can't be predicted, prevented or eliminated. Coming from a manufacturing and maintenance background, we knew this strategy was not only real, but also frightening. Unscheduled downtime costs add up quickly. The best way to reduce this cost is to reduce the downtime cycle by having a consequence reduction strategy in place. Make sure you have the right procedures, spare parts and resources in place to repair the failure in the shortest time possible.

RCM Blitz offers a Reliability Centered Maintenance approach that reduced the time and resources required for analysis. Attend this workshop to:

- Learn how develop a complete Maintenance Strategy for your equipment
- Learn where to apply predictive and preventive maintenance tasks
- Learn how to determine what spare parts are critical to your business and what parts can be eliminated from your inventory
- Improved Manufacturing and Equipment Reliability
- Reduced Maintenance Costs
- Reduced Unit Cost of Finished Product
- A Reduction in Health, Safety and Environmental Incidents

## Bonus Workshop #2 The Manufacturing Game®

The Manufacturing Game® is a strategic simulation of a manufacturing plant. It is a powerful tool for teaching the principles of Systems Thinking, High Commitment & High Performing Teams, planning, and defect elimination in a Total Quality environment. The Manufacturing Game® is particularly useful for revealing:

- Organizational breakdowns caused by "local" or functional perspectives
- The challenges of reversing "momentum" of past practices within an organization
- How the structure of a system drives its behavior
- The tendency of feedback loops to amplify or diminish management actions and responses
- Breakdowns caused by operational and informational delays in the "system"
- Our tendency in decision making to focus on what is measurable rather than what is important
- Actual steps for transforming a mediocre facility into one where production, quality, and teamwork are sustainably increased even as the resources required for operation are ultimately reduced

The Manufacturing Game® is a hands-on learning experience where participants work together in teams of three to six players. Team members make assessments about the operation and performance of their departments and the organization, make requests and promises to one another, and make increasingly proactive decisions about production, strategy, planning, inventories, manufacturing, effectiveness, maintenance, and the allocation of scarce resources. Managers, staff, operators, mechanics, storeroom, and support personnel who play The Manufacturing Game® will benefit by becoming more effective at:

- Achieving global goals while handling functional tasks
- Collaborating with other functions to optimize organizational performance
- Maintaining a long term perspective while servicing short term needs and goals
- Viewing an organization's structure as a network of interactions with many feedback loops, delays, and constituencies
- Identifying "high leverage intervention points" within an organization to improve performance
- Thinking, planning and acting proactively in the midst of uncertainty and pressure

Is your organization hesitant to adopt a reliability-based approach to maintenance?
Trying to change organizational culture is often challenging, but it is also very rewarding.

## Bonus Workshop #3

### The Reliability Game®

The Reliability Game is designed to teach participants how to make the transition from a reactive to a proactive maintenance environment. They will learn to "follow the money" and further their understanding of the business potential of reliability. Participants will learn:

- The financial opportunity associated with proactive maintenance
- Where the money goes
- How to stop wasting money
- How is it used?

The Reliability Game is played by teams of four people who will assume one of the following roles: Finance Manager, Purchasing Coordinator, Maintenance Resource Planner, Operations Coordinator. The concept is simple: each team determines the best way to manage their equipment, money, time, labor and material resources. Throughout the simulation, each team's financial performance is tracked and discussed, creating a competitive atmosphere. By the game's end there is typically a greater appreciation for the value of reliability and the entire reliability philosophy.

# RCM-2008/EAM-2008/MTrain2008 Expo

No other maintenance and reliability focused event brings more products, services, software and training providers than the Reliabilityweb.com Expo. No other event does as much to help you make sense of the numerous purchasing options.

The RCM/EAM/MTrain-2008 Expo is the place to find solutions as you make, develop and build your own best practices. Please find a quality solution provider by using the alphabetical list below.

## Expo Hours

| | | |
|---|---|---|
| Tues- | Mar 18th | 4:00pm – 6:00pm |
| Wed- | Mar 19th | 9:00am – 3:30pm |
| Thur- | Mar 20th | 9:00am – 1:00pm |

## Exhibitor List

- 24/7 Systems
- Aleier
- Allied Reliability
- ARMS Reliability
- Andromeda Systems
- Asset Performance Technologies
- AssetPoint
- Azima
- Blue Mountain Quality Services
- Cantronics
- Commtest
- Des-Case
- DLI
- DTS-Globa
- Emerson Process
- GE Energy
- Global Knowledge Management
- Hawk-IR
- Initiate Action
- Invensys
- IO Tech
- Isograph
- Ivara
- JMS Software
- Kittiwake Americas
- Lubrication Systems Co
- Ludeca
- M&H Systems
- Manufacturing Game
- MasteringMaintenance.com
- Mikron
- MRG
- OMCS
- Oracle
- PdMA
- Philadelphia Mixing Solutions
- Preops Integrated Solutions
- Progressive Maintenance Technologies
- Projetech
- RMG
- SERCO
- SPM
- Timken
- Ultra-sound Technologies
- University of Tennessee
- Uptime Magazine
- Vibralign
- Wyle Labs
- Zachryl

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# RCM-2008/EAM-2008/MTrain 2008 Schedule

## Monday, March 17th

7:00am – Breakfast

8:00am - 4:00pm – Bonus Workshops

| Bonus Workshop #1 | Bonus Workshop #2 | Bonus Workshop #3 | Bonus Workshop #4 |
|---|---|---|---|
| Introduction to RCM Blitz by Allied Reliability | Manufacturing Game by Ledet Enterprises | Reliability Game by MRG/GE | Reliability Roundtable |

## Tuesday, March 18th

7:00am – Breakfast

8:00am - 4:00pm – Pre-Conference Workshops

| Workshop #1 | Workshop #2 | Workshop #3 | Workshop #4 | Workshop #5 | Workshop #6 |
|---|---|---|---|---|---|
| Advancing Reliability & Maintenance by Jack NIcholas Jr. | PM Optimization Workshop by Steve Turner | Establishing a Competency Based Training by Perry Lovelace & Andy Page | Planning and (Re) Implementing an EAM System by Tim White | Maintenance Planning & Scheduling by Tim Kister | Developing Effective Maintenance Work Processes & Solid Equipment Reliability Programs for SAP PM by Neil Waugh, Marius Basson & Michael Gill |

4:00pm – 6:00pm - Welcome Reception in Expo Hall

9:15 – 11:00pm - Bowling Night Sponsored by Reliabilityweb.com and Uptime

## Wednesday, March 19th

6:30am – Breakfast

8:00am - 9:00am – Short Courses

| RCM | RCM | MTrain | EAM | EAM | SAP Plant Maintenance |
|---|---|---|---|---|---|
| The 7 Questions of RCM by Doug Plucknette & Bill Keeter | Using the RCM Project Managers Guide by Jack Nicholas Jr. | Changing Roll of the Craftsperson in NA Industry by Chuck Kooistra, CMRP | Remediation of CMMS Data is Essential to support RCM by Scott Weston, CMRP | Identifying, Planning, Scheduling, Executing & Documenting by Dave Abecunas, CMRP | Asset Performance Management in an SAP World by Eric Wegscheider & James Nesbitt, |

9:00am – 9:45am - Coffee Refreshment and Snack in Expo

9:45am - Welcome Address by Terrence O'Hanlon

10:00am - Keynote Address - John Schultz - Return on Asset Reliability

10:45am Keynote Address – Winston Ledet – The ABC's Of failure – Getting Rid Of The Noise In Your System

11:30am – 1:00 pm – Lunch and Expo

1:00pm – 1:45pm – Learning Zone Sessions

| | | | | | |
|---|---|---|---|---|---|
| Implementing RCM Globally at HOLCIM Cement by Hans Burger and Steve Lindborg | RCM For Medical Devices by Phill Thorburn | Ensuring Human Reliability by Derek Burley | Getting A Grip on Maintenance Performance by Remco Jonker | The Benefits of an Integrated Reliability Strategy driven by RCM at Graphics Packaging Inc. by Dennis Belanger and Tim Penny | SAP PM in Your Future? – How to Plan for Success by Mike Schultz |

2:00pm – 2:45pm – Learning Zone Sessions

| | | | | | |
|---|---|---|---|---|---|
| Using RCM to Build a Reliability Culture at Lockheed Martin by Rich Robertson CMRP/Mark Witkowski CMRP | RCM of Oil Immersed Transformers: A Work Group Approach from Several Companies by Iony Patriota de Siqueira | Utilizing Knowledge-Based Maintenance for Operation and Maintenance Activities by Eng. Sultan AL Khuraissi | Managing Continuous Improvement at Seattle Tacoma Intl Airport by Jennifer Mims | Operations Assurance Project for Chevron's Agbami Floating Production Storage and Offloading by Fatih Yeter, CMRP | The Secret Sauce in Integrating 35 Different Reliability and Condition Data Sources with SAP PM by Darryl Barney & James Nesbitt |

2:45pm– 3:30pm Refreshment and Snack break in Expo

3:30pm – 4:15pm – Learning Zone Sessions

| | | | | | |
|---|---|---|---|---|---|
| Reliability Case Study of Analysis of Bottle Packaging Line by Dan Might and Loyd Hamilton | Delivering Results with Classical Reliability-Centered Maintenance at the U.S. Postal Service by Ray Darragh, Mac Smith, Nick Jize | The Development of a Local and Distance Delivered Reliability and Maintainability Engineering Masters Degree Program by Wes Hines | Information Driven Reliability Centered Maintenance by Stephen Slade | Motor Asset Management from Cradle to Grave by Noah Bethel | Rapid ROI Approach to a Multi-Site Reliability Improvement Strategy by John Keller |

6:00pm – 9:00pm – Mardi Gras Dinner and Celebration sponsored by AssetPoint, Ivara, Timken and ORACLE

please call 1-888-575-1245 or 305-735-3746 with any questions

# Thursday, March 20th

| | | | | | |
|---|---|---|---|---|---|
| 6:30am – Breakfast | | | | | |
| 8:00am – 9:00am – Short Courses | | | | | |
| **RCM** | **RCM** | **MTrain** | **EAM** | **EAM** | **SAP Plant Maintenance** |
| Why Equipment Fails by Henry Ellmann | The need for Implementation Frameworks and their value in RCM Initiatives by Anthony McNeeney | Developing a Pay for Skills Program by Pete Little | Capturing the Knowledge of an Aging Workforce by Paul Dufresne | Condition-Based Maintenance Using Continuous Monitoring: Developments and Examples by Wayne Stargardt | SAP - Managing Calibrations by Craig Read |
| 9:00am – 10:00am - Coffee Refreshment and Snack in Expo | | | | | |
| 10:00am – 10:45am – Learning Zone Sessions | | | | | |
| RCM Problem Solving by Wayne Vaughn | Combining RCM2 with Asset Performance Software to Increase Equipment Utilization by Mike Schultz | Certification and Reliability by Ramesh Gulati, CMRP | Implementing CMMS? Let me tell you what I have learned by Steve Mislan | Managing Reliability Information Across the Corporation by Forrest Pardue | People – Managing Through Implementing a Reliability Program Utilizing SAP PM by Ryan Sletmoen |
| 11:00am – 11:45am – Learning Zone Sessions | | | | | |
| Implementing RCM based Maintenance in a large, diverse, international Conglomerate – United Technologies Corporation by Robert Latham & Dennis Belanger | A Case Study of the Lockheed Martin Classical RCM Application to a New 30 Ton Overhead Bridge Crane by Terry Spychalski and Terry Finnegan | Canada's Maintenance Management Professional Certification Program by Norm Clegg | Roadmap to successful Maintenance Management System Implementation by Jim Caldwell | Designing asset management software for maximized usability and productivity in close cooperation with the industry itself by Anders Lif, IFS | Open Panel Discussion: SAP PM and Reliability, What's Next? by John Keller, James Nesbitt, Mike Schultz |
| 11:45am – 1:00pm – Lunch and Expo | | | | | |
| 1:00pm - 3:00pm – Biggest Challenges Discussion and Declaration Statements | | | | | |
| 3:00pm – 3:15pm – Alienware Giveaway and Conference Wrap Up | | | | | |

# Official RCM-2008/EAM-2008/ MTrain-2008 Hotel


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# What's Included

## RCM-2008/EAM-2008/MTrain 3 Day Conference Pass includes:

- FREE Bonus Workshops Monday March 17
- Choice of 6 Full day Pre-Conference Workshops on March 18
- 12 Short Courses on RCM, EAM, SAP-PM and Training
- 30 real world case studies by maintenance and reliability professionals
- Expo hall pass
- Expo Refreshments
- Daily Hot Breakfasts
- Daily Lunches
- Welcome Reception
- Bowling Night
- Mardi Gras celebration and Dinner
- Proceedings CD ROM
- Proceedings Web Site for advanced download
- Bonus CD ROMs
- Conference Program Guide
- Access to Ivara's SAP-PM Strategy Sessions and Learning Lab
- Access to the Internet Café
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# Conference Fees

## 3-Day

RCM-2008/EAM-2008/ MTrain-2008 Conference Pass (March 18-20)

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**$1299 After Feb 1st**

## 2-Day

RCM-2008/EAM-2008/ MTrain-2008 Conference Pass (March 19-20)

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