

The Critical Plant Manager

'We understand your need to effectively manage your assets'

JAHCon
Physical Asset Management Pty. Ltd.

Newsletter
December 2008

A newsletter from JAHCon Physical Asset Management Pty. Ltd. to keep our current and potential clients informed of our ongoing activities and to raise awareness of how JAHCon may be able to help your organisation meet its Asset Management needs.

This newsletter also provides a forum for sharing Asset Management ideas and experiences.

Projects

A current project requires the development of an Asset numbering system, Asset register and maintenance plans for a drilling facility. This project highlights some of the problems discussed in an earlier newsletter - 'Effective Asset Registers', March 2008.

The competing aims of keeping the equipment numbering system as simple as possible, while allowing growth in the future, is well demonstrated in this project. It is human nature to design the equipment numbering system for the assets and organisational structure we are currently managing, but to neglect the analysis of future growth and its consequences for the equipment register.

While the needs of this project have been met at this stage, it does highlight the various approaches commonly encountered. If readers are interested in sharing their ideas on equipment numbering please send them to me and I will place them on the web-site for discussion and comments.

Seasons Greetings

I would like to extend my best wishes for the holiday season and the New Year to all our readers. I trust you've all had a safe and enjoyable break and looking forward to the opportunities presented in 2009.

This has been the first full year of our newsletter and there has been some interesting discussion and feedback, both on the newsletter itself, and on some of the topics covered in individual issues.

The management of Risk in Asset Management, as well as the knowledge transfer project mentioned in the Project section of the September newsletter, amongst others, generated significant interest. The knowledge transfer project is expanded upon in the 'User Centred Design' article in this issue. Those seeking further information on this interesting topic can get in touch with me using the contact details at the foot of the back page.

I had hoped by now to have a web-based forum page available to provide an information sharing facility for consulting clients and those who have attended the various training courses and need backup support. Unfortunately, the demand for both consulting and training has prevented us from getting the forum up to a standard I was willing to accept and therefore it will be the New Year before the forum page is available.



Training News

Introduction and Advanced Planning and Scheduling and Asset Management courses have been run through 2008 and are scheduled for inclusion in the 2009 calendar. In addition, Reliability Centred Maintenance and Root Cause Analysis courses will be available in 2009, amongst others. These courses will be provided at both introductory and advanced levels. Course dates and venues will be available on the JAHCon web-site as they are finalised.

The introductory courses have been designed to cater for those new to these topics. The advanced courses are designed for those who wish to expand their training beyond the introductory level, or wish to revise material they may have studied in the past. Courses take their 'baseline' from the original documents of the relevant material where available, as well as incorporating later developments and industry examples. It is sometimes difficult to improve on the original documents and concepts and going back to basics is often the best way to start.

These JAHCon course's do not require the purchase of specialised software or other add-on's and are designed to maximise the ability of participants to roll out the learning at their own sites. With this in mind, participants can access basic telephone or e-mail support through JAHCon. More comprehensive support is available by arrangement. We realise the more successful participants are in implementing our courses, the better the outcome for participants and JAHCon.

Training Schedule for 2009 - Preliminary only

The training schedule for 2009 is still being prepared but the following gives some idea of the topics and timing being planned.

1. March 17th-18th - Introduction to Planning and Scheduling, Kuala Lumpur, Malaysia.
2. March 19th-20th - Advanced Planning and Scheduling, Kuala Lumpur, Malaysia.
3. April (TBA) - Reliability Centred Maintenance, Christchurch, NZ.
4. May (date TBA) - Root Cause Analysis - Fundamentals, Integration and Application, Adelaide, SA.
5. June (date TBA) - The Management of Maintenance Spare Parts, Gladstone, Qld.
6. July (date TBA) - Maintenance Budget Management and Control, Brisbane, Qld.
7. August (date TBA)- Critical Vessel Management, Brisbane, Qld.
8. September (date TBA) - Condition Based Maintenance, Brisbane, Qld.
9. October (date TBA) - Criticality Assessment and Implementation, Brisbane, Qld.

The dates and venues are flexible at this time and more detailed dates and venues will be posted on the JAHCon web-site as the course dates approach. Postal and e-mail reminders will be circulated for these and any other courses offered well ahead of time.

User Centred Design

In the 'Projects' section of our September newsletter, I mentioned an ongoing project where a formal knowledge transfer between site and the design team was being undertaken by a client. There was some interesting feedback from this article and this section will expand a little on the underlying concepts. The program referred to in the September newsletter is being conducted by a large mining client who recognises the opportunity for final design improvement using this approach.

The aim is to improve the project outcome by refining the design of the new plant, using site experience to design-out undesirable features and reinforce those known to be beneficial. Using this process, site experience is fed into the early design phase of a new project using a formal and systematic methodology. The majority of useful information comes from Operation and Maintenance experience with similar plant, over an extended period of time and in a similar operating context. This feedback is especially valuable when similar equipment or systems is to be used in the up-coming project. Even if the project includes unfamiliar equipment, site experience with familiar sub-systems and management structures is still relevant and valuable.

While the use of this methodology is relatively new to the client (and I believe, in industry), there is an established body of material called 'User Centred Design' on which it is based. Reviewing my papers from my PhD research days, I realised my first publication on this topic was in February 1994 and was called 'Design and Maintenance – Closing the Loop'. This title provides a good indication of the underlying concept with the aim being to close the 'loop' between end user experience and the early design phase of later projects. It was not until this latest project that I have come across its 'formal' use in industry.

There are many ways in which this methodology can be implemented with most being qualitative in nature and requiring no specific software or special 'tools' to implement. Regardless of the format used to manage the knowledge transfer, the minimum necessary components include:

- a willing source of experience and information from the site.
- a willingness to listen on the part of the design team.
- a structure to manage and promote this dialogue.

In my February '94 paper, I used a design Failure Mode and Effects Analysis (FMEA) to analyse the initial design and to capture the recommended changes proposed by site as well as the likely impact on costs, schedules, etc. This provided a means of tracking design changes and improvements throughout the Asset Life Cycle.

As the plant is utilised throughout its life, design changes, maintenance developments etc. contribute to the knowledge base which can be used to inform future design assessments and build on the whole of life experience of earlier, related projects. The retention of experience based knowledge within the organisation grows over time and reduces the need for re-inventing ideas.

The clients implementation of this approach uses a structured data collection methodology, developed in-house, and supported by a basic database tracking system and facilitated workshops.

Regardless of the process used to support this feedback loop, the basic concept is sound. After many workshops dealing with various aspects of this major project, the value of the feedback is easily demonstrated through better design outcomes, improved site-project interaction and increased end-user 'buy-in'.

See www.jahcon.com.au for additional details.

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