



## New vibration analysis training

Rockwell Automation customers can now enhance their predictive maintenance knowledge thanks to new courses being offered in vibration analysis. Commencing in February 2003, three new courses will provide personnel with the theoretical skills needed to implement effective vibration monitoring programs. Complementing more product-specific courses—such as those based on the Enshare Emonitor Odyssey software—the new courses are general in scope and, relevant regardless of the products customers use, or intend to use, in their plants.

Vibration analysis is proving to be a vital tool in today's manufacturing industry. According to Amber Hurley, training services manager Rockwell Automation

Australia, the technology allows managers to get early warning of mechanical deterioration in equipment and plan accordingly. "Our goal is to help customers to manage their assets and lower their cost of production. By identifying unusual operating issues through vibration analysis, customers can get ahead of the game and schedule maintenance activities that aren't going to interfere with production," she said.

Now, Rockwell Automation Australia is making the theory behind the technology more accessible; its classroom-based three-day courses will be run throughout 2003 at locations around Australia. For more details of the vibration analysis training, contact your local Allen-Bradley distributor or Rockwell Automation on 1800 809 929. ■



## Sydney Airport does maintenance on the fly

Operational efficiency is a key consideration for the majority of organisations, and never more so than at Sydney Airport, the axis of Australian air travel. The full gamut of the airport's maintenance activities is managed via its computerised maintenance management system (CMMS), Maximo, which performs a range of functions such as maintenance scheduling, asset tracking and parts procurement.

In February 2002, Sydney Airport installed a wireless network for operational use, and which by March 2003 will provide public internet access for travellers using notebooks or wireless devices in Terminals 1 and 2. Immediately, the potential of wireless communications as a tool for improving airport maintenance operations also became evident. With the right application, mobile maintenance crews would be able to interact with the centralised Maximo server in real time via handheld computers and the wireless link.

Rockwell Automation's Manufacturing Business Solutions specialist-consulting group, a subsidiary of the company's Global Manufacturing Solutions group, was engaged to implement the solution.

According to Ron Turton, manager of Manufacturing Business Solutions, the main goals were to eliminate double handling of information, improve data

integrity, and increase productivity by half an hour per person per shift. "The aim of the new paperless system was to minimise the time spent entering information into a computer terminal and maximise the time actually spent doing work," he said.

Intermec 700 industrial handheld computers supplied by Walker Data Vision have been introduced for each maintenance



crew. Each computer incorporates a CISCO radio card and the Maximo Mobile Suite software solution by SYCLO, which together enable wireless integration with the Maximo server. This allows the maintenance crew to interact with the main server 'on the fly'—they can download work orders and enter information directly from any maintenance point, without having to revisit the workshop to obtain further information.

"Basically it's a mobile version of Maximo," Turton said. "It allows a tradesman in the field to have full access to his work orders as though he was sitting at a Maximo terminal."

Manufacturing Business Solutions engineers worked extensively with Sydney Airport to determine which data and information from the enterprise asset management system was to be made available on the handheld computers. A significant challenge was configuring the software to allow maximum security over the wireless network, without compromising the security of the application. User acceptance tests were then carried out with the aid of maintenance crews, and the system was commissioned.

"This type of mobile solution can be applied to a whole host of business systems," said Turton. "It includes other computerised maintenance management systems and enterprise databases—for instance it could be used as a mobile enterprise resource planning (ERP) system." He added that mobile systems don't have to utilise a wireless connection: data can be entered into a handheld computer and synchronised later with the enterprise system using a variety of communication methods. ■

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