

## Capturing the Expertise of the Aging Workforce

Written by Gino Palarchio, Society for Maintenance & Reliability Professionals  
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Is your company concerned about retaining the enormous amount of knowledge that will be lost when experienced maintenance workers retire? If the answer is yes, you are not alone; capturing the expertise of retirees is an urgent challenge facing many companies today.

These workers collect a wealth of knowledge during their many years on the job, but this information is almost never formally documented or transferred to others.

Their expertise includes asset prioritization, asset condition and performance targets, inspection knowledge, and general know-how pertaining to the maintenance of critical assets. If companies do not systematically collect this important information while employees perform their jobs, all of this knowledge will be lost upon retirement.

Most maintenance organizations have become accustomed to manually collecting and storing asset condition data, usually where it's most accessible to the employees—in their personal "little black books." These books hold enormous amounts of maintenance expertise, and, unfortunately, they either disappear or become meaningless when the employees retire.

According to a Hudson Institute study on the state of the workforce in North America, more than 30-40 percent of maintenance trades people will be retiring over the next five years. This problem is particularly acute in the utilities industry where imminent retirement estimates are as high as 50 percent.

While retiring rates are increasing, fewer people are entering the maintenance profession. Apprenticeship programs are at their lowest levels in decades. There are various reasons for this trend, but they all lead to a single conclusion—organizations must accomplish more with fewer resources.

Companies that understand this issue are turning to reliability software to capture the expertise and knowledge of their retiring workers.

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Several years ago a prominent North American manufacturer realized that the average age of its employees was about 52. It recognized the urgent need to capture the knowledge of these skilled individuals; often an employee would turn in his little black books as he was leaving. In these books he had collected years of experience related to his job, from condition monitoring routes to the tolerance levels of certain condition indicators that he had recorded.

Fortunately today, at this company, there is no crisis when an experienced maintenance professional retires. I recently attended a retirement celebration for one of its employees who had 45 years in maintenance. The company had arranged a big party, but for this retirement, there were no little black books to be turned in. Over the past few years, the company had transferred this employee's knowledge into a reliability software system.

Reliability software enables companies to capture, analyze, and use asset health data as the employees perform their jobs. Information such as condition monitoring inspection routes, tolerance levels of condition indicators, and the maintenance work plans required to conduct repairs is now available to all maintenance employees. It acts as a repository for condition data and all maintenance program information.

The reliability software manages online data, predictive data, and visual inspection data that users collect on operator rounds or during routine maintenance inspections. It then analyzes data and presents the results in a visual format, using flashing alarms and graphic capabilities to enable users to focus on problem areas.

In addition, the software has the ability to compare multiple data points to create a complete picture of the operating health of critical equipment. Employees no longer need to remember or spend time repeating calculations because the software performs them automatically.

Reliability software reduces the overall effort to perform and document the maintenance function and it systematically drives decision making—capturing asset condition knowledge that typically exists only in paper form, to effectively monitor equipment health and to identify the right work at the right time.

By turning to reliability software, companies can capture the expertise and knowledge of retiring workers and ensure the continuing viability of their organizations. **MT**