Written by Bob Williamson
Thursday, 01 July 1999 19:42

Bob Williamson

Skilled and knowledgeable maintenance and reliability employees are hard to find, a problem that has been growing for the past 7 years. With the strongest economy in decades coupled with the lowest unemployment rate in the U.S. in nearly 30 years, the shortages have reached a critical point in almost every industrialized part of America. As the baby boomers begin retiring in the next few years where will their replacements come from? How will we maintain the high levels of equipment and process reliability that our plants and facilities demand?

The military is not turning out as many technically qualified people into the labor market as they did through the 1980s. Vocational and technical schools have been hit with funding cuts and declining student interest in their offerings. Technically qualified teachers are even harder to find now than in the peak of technical training in the 1970s and early '80s. Coupled with this, many companies have cut back on their technical training efforts. We have a real challenge.

The skilled employee trends and challenges facing business and industry are presented in the 1997 Hudson Institute publication Workforce 2020 (MT 9/97, pg 50). They point to the shrinking labor force caused by slow population growth and the retirement of the baby boomers. However, many of the baby boomers may work well past the traditional ages of retirement for financial reasons or because they enjoy their professions. Employers would do well to find ways to retain their high levels of experience and transfer their knowledge to younger workers.

One answer may be focusing our attention on current nonmaintenance employees as the maintenance mechanics and reliability technicians of the future. They know the company, the equipment, and the pro-cesses. They are proven performers. But some fundamental changes need to occur to tap and further develop this potential pool of

talent.

Here are some critical steps to consider:

- Define the skills and knowledge required to maintain the desired levels of equipment and process reliability. Consider today's needs as well as the needs of future technologies. Look at the skilled employees' retirement projections. Target the needs of the business, the equipment, and the people. A comprehensive duty/task analysis of maintenance and reliability job roles is a good starting point.
- Develop a pay-and-progression plan that will facilitate moving nonmaintenance employees into a maintenance and reliability training progression. Now may be the time to also consider developing a multi-skill/pay-for-applied skills program for maintenance employees.
- Develop a way to legally assess and select candidates for the maintenance and reliability training program. Look for reading, writing, and math abilities; mechanical aptitude; learning ability; and computer aptitude as a minimum. Base the criteria on the duty/task analysis and the current top-performing maintenance and reliability employees.
- Develop a structured, formal, in-plant training and qualification process for the targeted critical skills. Some assistance from local technical schools may be appropriate. But lean toward more equipment- and process-specific training and skills qualification. Use your top performers as coaches, mentors, and classroom instructors if needed. Set a training budget equal to 2 to 4 percent of payroll, minimum.
- Begin selecting the best-of-the-best employees to be formally groomed for maintenance and reliability job roles. Develop a schedule to phase these new trainees into the programs where skills shortages exist and well in advance of retiring skilled people.
- Base the progression of the trainees on achieving specified levels of demonstrated performance on the job rather than on written testing.

In general, top management must create a work environment that is conducive to senior employees sharing their skills and knowledge. In some facilities people see their job security based on the little secrets they know about equipment maintenance. They must be assured that they will not lose their jobs or be penalized by sharing what they know as part of this new maintenance and reliability training program. In some plants we have had to put this in writing. Then, find ways to engage today's employees in preparing for the future. Use the principles discussed in Worker-Centered Learning (MT 3/93, pg 51) to engage the employees in designing, developing, and implementing a training and qualification process. **MT**

Joomla SEO powered by JoomSEF