# **DoD Ergonomics Working Group NEWS**



Issue 96, September 2009

# Embracing Vendor Relationships to Improve Quality

by Sharon Wilson, Industrial Hygiene Technician, RRAD, and John Pentikis, Ergonomist, USACHPPM

## **Ergonomics Program Goals**

The word ergonomics has the same meaning in any textbook on the subject; what is different is how people apply ergonomics. The goals of ergonomics are consistent in that we all try to:

- Identify ergonomic risk factors that expose a worker to a work-related musculoskeletal disorder (WMSD).
- Develop solutions to minimize or eliminate the risk factors.
- Remove the risk from the employees daily work activities.

Although installations and agencies may take similar identification steps, risk removal steps can be approached in different ways. At Red River Army Depot (RRAD), we have thousands of employees doing physically demanding work in

an effort to quickly and efficiently overhaul light and medium weapons systems and deliver them back to Soldiers in the field.



USACHPPM ergonomists measuring hand arm vibration typifies embracing vendor relationships. USACHPPM offered a service RRAD could not provide. The end result was using hand tools that placed less vibration exposure on RRAD mechanics.

#### The Need for a More Aggressive Approach

When RRAD embarked on its initiative to be more aggressive in implementing ergonomics into its daily practice, the prospect was daunting. Employing a concept that was learned in an ergonomics class—"the one best way to do a job"—it was evident from the demands of the jobs at RRAD that we were not always doing a job the one best way. There were risks virtually everywhere, there was a limited level of installation expertise, and there was an overall feeling that the lack of an ergonomics plan was affecting RRAD's bottom line. This led us to believe that the promise we make to Soldiers, "Our Best Nothing Less for the Warfighter," was not being kept. So we took a step back and asked ourselves how we could best implement effective ergonomics into the daily routine at RRAD.

## The Partnership Solution

Our solution was to form strategic partnerships with organizations we felt could help us.

- We looked at organizations within the Department of Defense that tore apart and rebuilt helicopters to see what challenges they faced in trying to make demanding tasks easier and to see what General Services Administration products they value.
- We toured an automobile manufacturer in the civilian sector to see how they streamlined processes, managed inventory, and used tooling to improve jobs that had an unpredictable cycle time.
- After touring an automobile manufacturing plant, their best practice of tire installation was implemented at RRAD.
- We actively sought out advice from an on-site defense contractor that worked on the same weapons systems as RRAD to learn about special equipment they developed, storage and shipping methods, and contacting improvements.
- We sought out Army ergonomics consultants to provide us with advice on what workstations needed immediate ergonomic surveys, how to best manage these workstations, and to find the appropriate vendor for specialty equipment that needed to be purchased. These relationships helped us find a direction for how to apply ergonomics and also gave us an idea of the range and costs of an appropriate long-term intervention to a workstation.

Our most important partnership was with the RRAD Lean Six Sigma Office. Before a work area was "leaned," it was difficult to determine what aspects of the job were poorly designed. There was equipment that may or may not be used at the workstation, the process was not clearly defined, and there was not a real understanding of how the worker was interacting with his environment. Once a job underwent a Lean Six Sigma renovation that all changed and the ergonomic deficiencies of the work area became better understood. This in turn led to an easier way to develop solutions.

# **Making Improvements**

Solutions that we identify are submitted for funding through the RRAD recycling fund using guidance in Army Regulation 215-1, "Military Morale, Welfare, and Recreation Programs and Nonappropriated Fund Instrumentalities." Not only does recycling minimize waste and lessen our environmental impact, it affords us the opportunity to make needed improvements.

#### Issue 96, September 2009

These improvements make jobs better, faster, and safer and show our workers that we are committed to improving the work environment. Ideas for ergonomic interventions come from many groups including the Commander, Department of Public Works, Division Chiefs, and workers during our weekly production line walkthroughs. The RRAD Ergonomics Committee achieves a great deal of satisfaction from input received from the RRAD employees who work the production lines. This feedback shows the RRAD Ergonomics Committee that our initiatives are appreciated, that workers know we are listening to their concerns, and—best of all we can take action.



Providing a special design tool developed by a tool manufacturer allows this worker to maintain a neutral work posture, exert less force, and meet production requirements.

#### **A Final Note**

Our path to ergonomic improvements is not without challenge. Anytime a new skill set is being learned and deployed there are bound to be setbacks. With the help of partnerships, a leadership dedicated to doing the right things for the right reasons, and the commitment of workers and supervisors, RRAD has been able to introduce ergonomics throughout the depot and we will continue to make ergonomic improvements well into the future.