

## Largest distribution center in DOD to participate in study of alternative fuel

By Jessica Walter, APR, DDC Public Affairs

Defense Distribution Depot Susquehanna, Pa., a strategic military distribution platform, will be the site of a two-year evaluation of hydrogen fuel cell performance as part of the Bush administration's Advanced Energy Initiative to reduce America's dependence on foreign sources of energy.

This summer, 40 forklifts in the distribution center's fleet of more than 1,000 will be retrofitted with hydrogen fuel cells – an energy source expected to power the equipment about three times longer than traditional lead-acid batteries.

During the evaluation, a team from the Defense Logistics Agency Research and Development Division will be studying the capabilities, costs, limitations and benefits associated with the use of the hydrogen fuel cells.

According to DLA Research and Development Division Chief John Christensen, the results of the evaluation will aid in determining the viability of hydrogen use in reducing America's dependency on foreign oil, coal and petroleum.

"We expect this project to support the development of the hydrogen economy



Defense Distribution Depot Susquehanna, Pa., a strategic military distribution platform, will be the first site used in the evaluation of hydrogen fuel cell technology by the Defense Logistics Agency's Research and Development Division. During the two-year evaluation, about 40 of the distribution center's forklifts will be retrofitted with hydrogen fuel cells similar to the one pictured.

while demonstrating the value of fuel cells in today's military support operations," said Christensen.

The data from the project will allow researchers to compare costs and operational characteristics that will be used to support the development of hydrogen fuel cell technology to be used by DOD, and ultimately by the general public.

"We will share the information we gather from this pilot with government researchers working to develop hydrogen technology for consumption on a larger scale," said Christensen.

Navy Capt. Jim Naber, DDSP Commanding Officer, sees tremendous potential in the study. "I just can't express how pleased I am that DDSP was selected as the first site involved in the hydrogen fuel cell project," Naber said.

"I see it as an opportunity to promote both national security and environmental stewardship," he added.

The pilot is expected to bring operational advantages as well.

"The batteries we use in the forklifts today last about eight hours. With the hydrogen fuel cells, we're looking at about 24 hours of use," said Naber.

Naber also cited rapid refueling as a benefit of the new technology. "Instead of waiting hours for a battery to recharge, a fuel cell can be refueled in just a few minutes."

If the hydrogen fuel technology is adopted by DDSP, the center could have more room for storage as well, a welcome idea in an environment where space is precious.

"If the battery charging locations are no longer needed, that could free up a considerable amount of space that could be used for storage," Naber said.

According to Christensen, DDSP represents the first in a series of pilot projects to demonstrate the use of hydrogen fuel cells in the forklifts that move vital supplies to America's military.

Two additional sites in the Defense Distribution Center's worldwide network, Defense Distribution Depots San Joaquin, Calif., and Warner Robins, Ga., are also scheduled to take part in future testing to explore hydrogen production, delivery and storage.

DDSP is the largest distribution center in the Department of Defense, responsible for shipping about a third of the items distributed by DLA each year. Each month, DDSP employees process more than 650,000 orders for millions of military supplies including repair parts, clothing, medical supplies, and electrical components.

## 5S technique improves productivity

By Annette Silva, DDJC Public Affairs

Sort, straighten, shine, standardize, and sustain – these five key elements can enhance any workspace by improving safety, quality, eliminating waste, and helping to raise productivity and morale.

During a recent Lean Foundations course that was taught at Defense Distribution Depot San Joaquin, Calif., the 5S technique was put into action in one of DDJC's warehouses.

Students in the course learned that incorporating the 5S technique into work areas can result in a well-organized workplace that is clean and uncluttered in addition to being good stewards of taxpayer's money and adding value to the customer.

Using this technique not only improves cleanliness, it also that allows the workforce to organize a work area for maximum efficiency.

The students worked hands-on in the warehouse and to their amazement found materiel that was lost while they were organizing the area. The "found" materiel ranged from drill bits to lens covers. The bottom line is that this was mission stock that was lost and was not adding value to the customer – the war fighter.

The technique is simple and consists of the following:

Sort – the first step which allows the workforce to remove all items that are not needed for their current workplace processes, allowing a simplified work environment.