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Huntsville Center Buildetin

On the Inside

Center, Baltimore District build largest induction solar wall in the country • Page 6

Fort Buchanan wind turbine

up, producing Page 7 MDMS makes progress on installations, facilities Page 9

OEDC provides solution to planting grass in dangerous places • Page 10

Housing team completes Level 2 certification training



Photo by Ric Hines

From left: Jason Adams, Larry McIntosh, Blaine Guidry, Garry Runyans and Raul Alonso work on a community group site design during a four-day training session to become Level 2 certified members of Huntsville Center's Housing Planning and Response Team.

By Debra Valine Public Affairs Office

S ix members of Huntsville Center's Housing Planning and Response Team recently completed Level 2 Certification training, making them eligible to support the Federal Emergency Management Agency in response to a disaster.

Garry Runyans, Engineering Directorate; Blaine Guidry, ED; Jason Adams, Installation Support and Programs Management Directorate; Larry McIntosh, ED; Raul Alonso, Chemical Demilitarization Directorate; and Ric Hines, Environmental and Munitions Center of Expertise traveled to Suffolk, Va., for the four-day course April 2-5.

The training included classroom training as well as field exercises at multiple locations that the State of Virginia is considering for development of temporary community sites to have prepared prior to a major event occurring.

"This training enhances Goal #3 of the U.S. Army Corps of Engineers Campaign Plan and ensures that USACE has a professionally credentialed contingency work force that is trained and ready See HOUSING on page 5

Commander's thoughts

irst, I want to reflect on the tragedy that happened at the Boston Marathon. It's always a shock when something like this happens. My thoughts and prayers remain with everyone affected: the victims, their families, the injured, first responders, medical personnel, etc. USACE had a number of employees in the area, but all were safe and accounted for.

Although I doubt we can ever stop this type of senseless action, I believe we are the best defense. By we, I mean the public. When you see something that just doesn't look right please report it promptly. Let the authorities decide what to do from there.

This is a good time to remind everyone how important it is when there is any type of disaster – whether natural or caused by man – that you call your supervisor to let them know where you are and that you are OK. Sometimes we forget to do this. When an event does occur, we provide apersonnel accountability report to headquarters. Please keep this in mind for future events.

On sequester and furlough, we've not heard a lot since the passing of the continuing resolution. We're still anticipating some form of furlough. Hopefully we'll know something official by mid-May. I'm reluctant to disseminate information that doesn't come from official channels. Just know we're working very hard to reduce as much of the impact as we can, and that we will share new information as it comes in.

Knowing that we might be in furlough status at the end of the year, we need to be working as hard as we can now to obligate funds because if we are on furlough, it will continue to the end of the fiscal year. Although the picture is not clear, I am seeing indications that this will be a very busy year end.

At the April business meeting, Huntsville Center's 2013 Implementation Plan was rolled out. It is my intent that we meet the Headquarters requirements outlined in the USACE Campaign Plan.

We know that with the impending furloughs and sequestration and other requirements, we do not have a lot of spare time to add new areas of emphasis. We are already very much in line with USACE priorities which tells me we are on track. As it stands, Headquarters has 14 priority actions. Huntsville Center has nine. Understand who has responsibility



Col. Robert Ruch

for the actions and metrics. The action officer is responsible forwatching the metrics and see if Huntsville Center has a role in it, i.e., energy use in buildings.

If the metric is to reduce energy use by a certain percent, we need to go back to Headquarters because we do not have a methodology for measuring that. Being in a leased building may also impact how we respond to the action. We will continue to work with HQ on metrics.

In May we're looking forward to a visit with Lt. Gen. Thomas Bostick, the USACE commander. He is scheduled to come to Huntsville May 28-29. This will be his first trip to the Center.

See COMMANDER on page 3

Hail & Farewell

Hail: Christi Edwards, Center Contracting; Edward Nixon Jr. and Tracy Phillips, Installation Support and Programs Management **Farewell:** James Long, ISPM; David Curry, CT; Matt Knox, Business Management Office; Kim Phillips, Engineering Directorate



US Army Corps of Engineers.

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Commander..... Chief, Public Affairs...... Editor. Col. Robert Ruch Debra Valine William S. Farrow

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The Bulletin asks:

How has Asian American Pacific Islander culture influenced the American lifestyle?



for 23 years, travelling to Germany, Turkey, Iraq and Korea. I loved the food in Korea. Living in the United States now, I am discovering a plethora of Asian food here. In one day in Huntsville, I can have sushi and sashimi in one of the many Japanese restaurants in the city, go to the Korean grocery store and buy the ingredients for Kimchi and Bulgogi, and take home spring rolls from one of the many Chinese restaurants in town. I also see American restaurants moving in this direction, with more of a focus on healthy food choices

> Natalie Jackson Installation Support and Programs Management Directorate



COMMANDER

continued from page 2

While in Huntsville, he also will be the keynote speaker for the Asian Pacific American Heritage Month observance at Bob Jones Auditorium. Huntsville Center's Equal Employment Opportunity Office is hosting this observance on behalf of Team Redstone. More information will come out from EEO as the date gets closer. One other important announcement, because we don't know how we will be affected by furlough, I decided to postpone the Engineer Day Picnic until a date to be determined later..

As always, thank you for all you do for the Corps and the nation. And, please, stay safe.

Employee Spotlight Unhui Nguyen

By Debra Valine Public Affairs Office

hhui Nguyen came to Alabama in January 2011 from Camp Carroll, South Korea, where she worked as a Family Readiness Support assistant.

She came to Alabama with her husband who had received a job offer here. She's been working for Huntsville Center since March 28, 2011.

Nguyen is a project management specialist in Installation Support Electronic Technology Metering branch. She assists project managers by processing invoices, creating labor codes, accepting funds and updating budgets.

"Assisting our Metering branch's project managers with invoicing, funding and reporting, allows them to focus on getting assigned projects complete and managing their customers," Nguyen said.

"The success of the project manager has a direct effect on the success of the Corps as a whole."

Her work in the Metering branch supports Goal 1 of the 2013 USACE Campaign Plan.

By providing effective tools to measure energy usage, the meters will allow energy managers at the installations to monitor, and in some cases, shrink their footprint and save environmental resources.



Photo by William S. Farrow

Nguyen said her career goal is to learn more about business and apply the knowledge to Corps business in the future. She has a degree in human resources management from Penn Foster College, an accredited online college located in Scottsdale, Ariz., and hopes to build on that once she finishes her developmental assignment.

"I love the support I get from my division, co-workers and supervisors," Nguyen said. "They are always willing to help me with any training or job related questions. I never feel like I am by myself and want to take this opportunity to express my appreciation.

"I have many special memories from the last two years," she said.

"While I was working as our division's secretary, one of my coworkers named me Super Sonic because I am always on the run."

The *Employee Spotlight* is intended to let Center employees shine for positively impacting the organization through mission achievements. Employees, or teams, are nominated on a monthly basis and are featured monthly on the Huntsville Center website. If you'd like to nominate someone within your office for this recognition, please contact Jo Anita Miley, Public Affairs Office, at 256-895-1585, or e-mail: JoAnita.Miley@usace.army.mil.

HOUSING

continued from page 1

to plan and execute all specified contingency missions to the highest performance standards both domestically and overseas," said Jeffrey Davis, Huntsville Center's HPRT coordinator.

The Huntsville team is one of six in USACE trained to support FEMA with temporary housing and/or critical public facilities following a natural disaster. Other USACE organizations with an HPRT are Huntington District, St. Paul District, New York District, Jacksonville District and Los Angeles District.

Huntsville's team responded in September 2011 to support flood recovery in Pennsylvania when the Susquehanna River overflowed following Tropical Storm Lee.

The team refurbished an existing mobile home park near Scranton, Pa., and extended existing mobile home parks near Bloomsburg, Pa., by constructing multiple new temporary housing unit placement pads at the Stony Brook and Country Terrace mobile home parks.

"The training helps the team gain better insight into what is expected of them in each of the critical positions on the Housing PRT," said Adams, who has deployed multiple times: to New Orleans in 2006 following Hurricane Katrina; in 2011 to Birmingham, Ala., following the tornado outbreak April 27; and later in 2011 to Pennsylvania following Tropical Storm Lee.

Of the team members attending the training, Adams isn't the only one with multiple deployments under his belt. Hines, Runyans and Alonso deployed to support Hurricane Katrina; Runyans and Alonso supported Alabama tornado

Housing PRT missions

- a. Temporary housing unit placement at individual sites
- b. Temporary housing unit placement at commercial parks
- c. Emergency group sites
- d. Design/build temporary housing group sites.
- e. Technical assistance to FEMA Individual Assistance Technical Assistance Contracts
- f. Critical public facilities

recovery; Alonso also supported Tropical Storm Lee; and Hines supported Hurricane Ike in Austin and Galveston, Texas. McIntosh has also deployed several times.

"The training helped identify some strengths and weaknesses on the team and will help us improve our ability to respond to future missions when we are called upon," Adams said.

"For the ones that have never deployed on a housing mission, the training provided them an opportunity to start seeing some of the requirements that they have to keep in mind during the early steps of the mission. Each mission is different, and you have to pull in the knowledge of previous deployments and other teams to help you respond quickly to the needs and requirements that FEMA may place on the team.

The time frames for responding to the requirements are typically very short and require strategic thinking and knowledge of residential requirements for temporary housing."

The training brought together experts supporting district PRTs, subject matter experts, temporary housing/critical public facilities specialists, FEMA and other agencies as required, in an on-site collaborative environment for an exchange of lessons learned and processes for improvement to disaster planning, response and recovery relating to the temporary housing and critical public facilities missions.

"Boots on the ground is the only true way to learn/develop for these types of missions," Hines said.

"To me the emergency operation teams are the true face of the Corps," Adams said. "These teams routinely interact with the public and individuals that have been affected by these events. It's very rewarding as a Corps employee to see these missions help those in need."

Davis, who also coordinates overseas deployments and the Family Readiness Network, is recruiting new team members in all positions: action officer, mission manager, mission specialist, sanitary engineer, electrical engineer, contract specialist, quality assurance supervisor, quality assurance inspector, cost estimator, resident engineer, database manager, National Environment Policy Act compliance specialist, site engineer, area engineer, administrative assistant and a graphic information specialist/computer-aided design and drafting specialist.

Center, Baltimore District builds largest induction solar wall in the country

By Andrea Takash Baltimore District Public Affairs Office

s the sun beats down on one of biggest buildings in the country, solar thermal collectors go to work providing enough heat for the 1.7 million square foot warehouse.

Spread across more than 40 acres, the Defense Logistics Agency's Eastern Distribution Center in New Cumberland, Pa., provides critical supplies for the military stationed overseas. DLA needed an alternative, cost-saving way to provide heat for this massive warehouse.

In the summer of 2011, Headquarters U.S. Army Corps of Engineers approached Huntsville Center about an Energy Conservation Investment Program energy reducing project. The Center teamed up with the Corps' Baltimore District to build the largest induction solar wall in the country.

"The project installed Solar Thermal Collectors on portions of the East and South walls for a total of 55,263 square feet of solar wall," said Dennis Lacy, Huntsville Center project manager. "This system provides preheated outside air to air handling units and the large fans located inside the warehouse."

Lacy compared the solar wall to layered clothing on the skin of the building. "The air gets in, and the sun warms it, providing heated air for the building's use," he said.

This two-phased solar wall contains a bottom portion of normal solar wall with a top portion that seals the air intakes.

"The bottom portion lets the air in," Lacy said. "The heated air rises and goes up to the top half, which is sealed off with a membrane to cover the perforations. The membrane considerably assists the outside air to only entering the system at the bottom section of the solar wall, providing additional insulation to the top half of the solar wall."

When the wall reaches 180 degrees, the dampers at the top portion open up to allow the heat to enter the warehouse, where large fans are strategically placed to circulate the heat evenly. In the summer, DLA will close the dampers to prevent unnecessary heat in the warehouse.



Photo courtesy USACE

The U.S. Army Corps of Engineers installed 55,263 square feet of solar wall on the Defense Logistics Agency's Eastern Distribution Center in New Cumberland, Pa.

"It could be 27 degrees outside, but the sun beating on the wall will still heat it up to 180 degrees," said Curt Ellsworth, Baltimore District construction representative. It is estimated that this solar wall will save DLA \$350,000 in annual energy costs.

"The PDT determined the location on the walls the solar wall should be placed to provide the best return on investment for the longest amount of winter sun exposure," Lacy said. "Prior to construction the contractor developed an estimated baseline of energy usage for a one year period. The contractor will also provide a measurement and verification report showing the energy savings for a typical year resulting from the installation of the solar wall."

Remi Bollana, Baltimore District's Harrisburg Area Office resident engineer, said he looks forward to seeing the results from the measurement and verification test.

"The test will show us how much fuel DLA can expect to save each year. and those funds can be re-allocated toward other programs," Bollana said.

This \$3.4 million project took less than a year to build. Lacy attests this success to the teamwork between Huntsville Center, Baltimore District, DLA and the contractor staff.

"Huntsville Center worked closely with Baltimore's Harrisburg Area Office and the customer in developing the scope, awarding the project, design reviews and managing the construction of the project," Lacy said.

Fort Buchanan wind turbine up, producing

By Debra Valine Public Affairs Office

he first of three 275 kilowatt wind turbines being erected on Fort Buchanan, Puerto Rico, is up and producing energy.

The turbines are part of a large, multi-project renewable energy/ energy reduction and Net Zero Water effort.

The U.S. Army Corps of Engineers, Engineering and Support Center, Huntsville, awarded a \$34 million task order contract to Johnson Controls Government Systems, Milwaukee Wis., Dec. 22, to install wind power generation, solar photovoltaic systems, water conservation measures, and other energy conservation measures at Fort Buchanan.

Overall projected project savings is 37,867 MBtu and \$2.6 million per year. Renewable energy savings are projected to be 5,973 MBtu solar PV, domestic solar hot water 106 MBtu per year, wind power 3,244 MBtu per year, and water savings of 37,144,000 gallons per year.

While not the first wind turbine for the Army – Tooele Army Depot has had a wind turbine since July 2009 – it is the first for the Army under an Energy Savings Performance Contract.

"This is a great project that has traditional energy conservation measures as well as renewable and water reduction," said Michael Norton, chief of Huntsville Center's Energy Implementation Branch.

An ESPC is a partnership between the Army and an energy services company. In consultation with the federal government, the energy services company provides capital and expertise to make



Army photo by José L. López

Anibal Negron, Fort Buchanan, Puerto Rico, Environmental Division acting chief, poses with the first turbine erected there in the background. Two more turbines will also be erected as part of a large, multi-project renewable energy/energy reduction and Net Zero Water effort. The three turbines should save taxpayers more than \$2 million a year. Huntsville Center's Energy Implementation Branch awarded the \$34 million task order project in December.

comprehensive energy and water efficiency improvements on facilities, or implements new renewable energy capability and maintains them in exchange for a portion of the generated savings.

This project supports President Barack Obama's directive that federal agencies use ESPC to make \$2 billion worth of energy efficiency upgrades over the next two years, as well as supporting the Army's energy reduction goals of 30 percent energy and 15 percent water reduction by 2015.

"This project employs wind and water renewable technologies and serves as an outstanding example of combining several technologies that together result in substantial energy consumption and cost savings for the Army," said Lisa Harris, project manager for the Fort Buchanan ESPC project.

"We are working with Anibal Negron, the Fort Buchanan energy manager on this project."

This first turbine on Fort Buchanan is at the South Gate. Turbines will also be erected at the old Directorate of Public Works on Fort Buchanan, and at the Roosevelt Roads location. The anticipated completion date is June 2013.

There are 10 energy conservation measures in the works that include the wind turbines, solar PV and water conservation measures.

Fort Buchanan is a NetZero installation for water conservation.

Work includes air cooled chiller replacement; energy management controls system installation; heating, ventilation and air conditioning system upgrades and window/split air conditioning system retrofits; energy-efficient interior and exterior lighting including street lighting upgraded to LED; occupancy sensors; renewable energy including a 1.2 megawatt solar photovoltaic, solar thermal water heating, and 825 kilowatt wind power generation; water/sewer conservation and irrigation system; and retrocommissioning services.

Closeout essential stage in contracting

By Curtis Wilson Center Contracting Directorate

ontract closeout is the final stage of the government contracting process. It begins when the procuring or administrative contracting officer confirms that all receivables have been delivered and completed.

As explained in Federal Acquisition Regulation 4.804-4, a contract is physically complete when the contractor has completed the required deliveries and the government has inspected and accepted the supplies; the contractor has performed all services and the government has accepted the services; and all option provisions, if any, have expired.

A contract is also physically complete when the government has given the contractor a notice of complete contract termination.

In the case of rental, use and storage agreements, the contracts are considered to be physically completed when the government has given the contractor a notice of complete contract termination or the contract period has expired.

A contract is not completed until final payment is made, any disputes settled and/or all administrative actions required by the FAR and specific agency procedures are accomplished.

For example, if the final amount due the contractor has not been determined or if there is an outstanding claim by or against the contractor, the contract may not be closed even if it is physically complete. FAR 4.804.5 lists the items the contracting officer must verify during the closeout process.

Despite this definition, note that under cost-type or time and material or labor hour contracts, the contractor does not have to deliver the required supplies.

This is because of the terms of the limitation of cost/limitation of funds and payments under the T&M and LH contracts clauses that specify that the contractor



does not have to continue performance once its costs equal the established cost ceiling of the contract.

Under these types of contracts, if the government does not provide additional money to the contract, that contract should be considered physically complete once the cost ceiling is reached.

The time standards for closeout of contracts, when closeout is accomplished by the office administering the contract, can be found at FAR 4.804-1.

Firm Fixed Price contracts should be closed no later than six months after the physical completion date. Cost reimbursement, time and material and labor hour contracts require settlement of indirect cost rates.

These contracts should be closed no later than 36 months after the physical completion date. All other contract types should be closed no later than 20 months after the physical completion date.

Once the contracting officer verifies all closeout actions have been accomplished, he/she fills out a contract completion statement (DD Form 1594 or equivalent) and places it in the contract file.

Once the closeout process is complete, the contract files are subject to the retention requirements in FAR 4.805.

Here at the Huntsville Center we have a business process applicable to all Center personnel and field office personnel who participate directly or indirectly in any stage of the project and contract closeout process.

The full closeout process in PD2 can be found at the following SharePoint link: http://go.usa.gov/ TRKW

The point of contact for the Huntsville Center's contract closeout process is Joaquin Tucker, For more information, call him at 256-895-1085 or send an e-mail to Juaquin.J.Tucker@usace.army.mil.



By James Campbell Public Affairs Office

he U.S. Army Corps of Engineers Meter Data Management System is helping Energy Managers keep tabs on resources and reduce waste as 74 gateways are being installed this year at Army installations.

The MDMS is an enterprise energy information system for the collection, analysis and display of energy data at the installation, regional and headquarters levels.

MDMS collects meter data about the consumption and production of electricity, gas, steam and water and allows that data to be analyzed and viewed, giving experts an opportunity to spot savings and fix problems much faster, said John Trudell, MDMS program manager at Huntsville Center.

The MDMS gateways being shipped to Army installations this year are essentially a bridge between the installation's energy data reporting system and the top level enterprise-wide system the Army envisions, Trudell said.

"This system gives the energy manager a comprehensive display of their energy footprint using a web portal," Trudell said.

The MDMS gateways, once installed, transmit the raw meter data to a system that runs sophisticated analytics. The software allows for the energy manager to compile and view easy-to-understand graphs and charts.

The systems are secure,

Meter Data Management System makes progress on installations, facilities



This graph from the Meter Data Management System software compares the electricity and gas use of two Army installations during a 30 day period from February and March. The analytics functions in MDMS provide an accurate picture of consumption for Army energy managers and leaders. (USACE graphic)

accredited for enterprise networks, and designed to enable a centralized reporting system, something the Army has wanted for quite a while, Trudell said.

"They can use it to develop savings, energy plans, conduct rate reviews, validate savings, prepare reports and compile accurate billing for tenants," he said.

Along with helping installation energy managers develop plans to save, a problem, such as a leaking water valve or electrical equipment that's not performing optimally, can be identified quickly, Trudell said.

When unexpected spikes occur, the data can often provide an

explanation or help the installation find and fix a problem with their systems.

Trudell said the system has already helped customers track down the source of power outages at two facilities and identified the cause of a spike in water use at another.

"MDMS will provide the integrated view," said Paul Robinson, chief of the Center's Energy Division. "This system is capable of bringing multiple Army enterprise systems together, providing a holistic view of energy data in a way that will empower energy and facility managers across our installations," Robinson said.

Ordnance and Explosives Design Center provides solution to planting grass in dangerous places

By William Noel Ordnance and Explosives Design Center

Planting grass is not a typical task for the U.S. Army Engineering and Support Center, Huntsville. However, when the grass began getting sparse in a mortar and artillery impact area on a steep hillside at West Point, N.Y., Huntsville Center's Ordnance and Explosives Design Center knew how to helped get new grass planted.

There is much more to West Point than just the U.S. Military Academy campus. Cadets there learn to become officers by receiving extensive military training on a large complex of ranges to the south and west of the Academy. Many of the ranges have been used since the Revolutionary War.

The impact area on one range, known as Cranberry Mountain, was pocked with craters from mortar and artillery explosions. Rain and melting snow washed away much of the remaining topsoil, leaving nutrientpoor soil too depleted to keep grass healthy.

Seeking a solution, environmental managers at West Point contacted the U.S. Army Corps of Engineers. Agronomist Tim Cary at the USACE Cold Regions Research Laboratory in Burlington, Vt. and workers at the Army's Aberdeen Test Center in Maryland collaborated to create seed balls that could be mechanically distributed across the area. Each seed ball contained three different types of grass seed and potting soil to provide fertilizer.

The mix was rolled into a ball about 1.5 inches in diameter and



Photo by William Noel

Carl Johnson (left) from Aberdeen Test Center and Tim Cary from the U.S. Army Corps of Engineers Cold Regions Research Laboratory, load the first grass seed balls into the spreader for distribution on Cranberry Mountain, an ordnance impact area used by the U.S. Military Academy at West Point, N.Y.

then rolled in xanthan gum to form a hard shell that would soften when it got wet, allowing the seeds to spread and germinate.

The concept was simple enough: distribute the seed balls on the hillside, except people are not permitted in the area without special escort due to the risk of detonating unexploded ordnance.

A rotary agricultural spreader would do the job, but any tractor used would have to be heavily armored to protect the driver. That challenge was solved by project manager Spencer O'Neal of Huntsville Center's Ordnance and Explosives Design Center.

Contractor Dawson-Zapata and subcontractor Robotics Fabrication had radio-controlled equipment that was already being used on ranges at other Army installations. The first seeding attempt last year was postponed by Hurricane Sandy, then rescheduled for March. Melting snow made the hillside slick, even for a dozer using caterpillar treads. A narrow path was cut across the hillside, then up the slope. Workers faced a challenge when the dozer blade was removed: the dozer blade used a two-point mounting system, but the spreader was configured for a three-point mount on the back of a farm tractor.

Field modifications using angle iron, nuts and bolts solved the problem. The hopper was loaded with seed balls and the dozer was sent remotely into the work area. A mere 15 minutes of the next two hours were required to distribute all 35,000 seed balls. The rest of the time was spent negotiating the slick path for reloading.

Continuous Process Improvement: boosting quality, reducing waste

By Carolyn Harris Business Management Office

ontinuous Process Improvement is an ongoing effort to improve processes, services and products and increase the quality outputs while reducing or eliminating waste and variations that don't add value.

Huntsville Center has several employees trained in implementing CPI and they are eager to work with the Center's directorates, divisions and branches to investigate practices and determine ways to improve processes.

Last year, four CPI initiatives were identified: Utility Monitoring and Control System Acquisition led by Joaquin Tucker; Furniture Program Acquisition Process led by Jordan Miller; Pre-Award Acquisition Process led by Lee Hanks; and Medical Repair and Renewal Delivery Process led by Deborah Neel.

Using CPI toolsets, Tucker, Miller and Neel (all Lean Six Sigma Green Belt candidates) identified non-value steps in each of their respective processes. Their recommendations improved processes and delivery times to customers. CPI works with three methodologies: Lean, Theories of Constraint, and Six Sigma.

Lean detects and gets rid of or reduces waste in processes. Reducing delivery, cycle and set-up times are benefits of Lean. Waste is elements in processes that don't add any value but may add cost. Waste comes in eight broad forms: transportation, inventory, motion, waiting, over-production, over-processing, defects and under-utilization of people.

Transportation deals with such things as inefficient facility layout, process islands versus continuous flow, batch (push) mentality, lack of right sizing, long set-up times and lack of multi-skilled workers.

Inventory deals with excess inventory. If you don't have the right item in the right amount, or if you have more items than you need, it causes inventory and inventory creates waste through cost, cycle time and inefficient physical flow.

Motion problems are inefficient facility layout, inefficient tools and/or fixtures, lack of standard work

causing inconsistency and batch movement of product.

There is also waiting,

over-production and over-processing as types of waste. The seventh type of waste is defects or rework.

Defects deals with things such as poor procedures or standards, machines, non-conforming materials, worn or out of tolerance tooling, outdated work instructions, policies and procedures, and human mistakes.

The last type of waste is under-utilization of people.

There may be some work or processes that are perceived as non-value added but are necessary due to written policies. These are called business value added or non-value added but necessary.

Theories of Constraint are managing system's bottlenecks. We know if our processes have constraints if we are not meeting goals. The Constraint must be known in order to improve the overall performance. There is always one step in a process that is the slowest; this is constraint or bottleneck. Theories of Constraint looks at things holistically and interdependent. It also controls the output from the entire process.

Six Sigma is a data driven methodology managing process variations that cause defects and to systematically working toward managing variation to eliminate those defects. It reduces variation in a process through the Define, Measure, Analyze, Improve and Control (DMAIC) Process. Some processes can have accuracy without precision yet others can have precision without accuracy. Six Sigma attempts to achieve accuracy with precision. CPI tools are used to increase customer satisfaction by meeting or exceeding their expectations, achieving cost wise readiness, improving quality of our products and services, and improving our work environment. CPI also transforms our processes by reducing waste and variation, exposing us to continuously review our daily process, and sustaining Huntsville Center's continuous improvement on products and services. If you have an improvement initiative or questions on CPI/LSS, contact Carolyn Harris at 256-895-1393 or send an e-mail to Carolyn.D.Harris@usace. army.mil



Army seeks round of base closure, realignment for 2015

WASHINGTON (Army News Service) – The Army says a round of base realignment and closure for fiscal year 2015 is necessary to save tax dollars, consolidate resources and adapt to force reductions. With a smaller total force over the next years – from a high of 570,000 in 2010 to 490,000 in 2017 – the Army's need for facilities will also decrease, said Katherine Hammack, the Army's assistant secretary for Installations, Energy and Environment.

"The resulting force structure reduction will create excess capacity at several installations," she testified to the Senate Armed Services Committee, subcommittee on readiness and management support, April 24. "With a reduced end-strength and force structure in the United States, now is the time to assess and right-size the supporting infrastructure," she said.

Hammack said the Army is already downsizing its infrastructure in Europe, and that it is working closely with the Office of the Secretary of Defense to examine whether there are additional cost-saving opportunities in Europe through joint or multi-service consolidation. Infrastructure changes in Europe, while important, are not part of base realignment and closure, known as BRAC. The BRAC process – including past rounds of BRAC and any future rounds of BRAC – applies only to installations in the U. S.

With a 45 percent reduction in force structure, Hammack said the Army is implementing a 51 percent reduction in infrastructure, a 58 percent reduction in civilian staffing, and a 57 percent reduction in base operating costs.

"A future round of base realignment and closure in the United States is essential to identify excess Army infrastructure and prudently align civilian staffing with reduced uniform force structure, just like we are doing in Europe," she said.

For fiscal year 2014, the Army requests \$2.4 billion for military construction, Army family housing and the Army's share of the Department of Defense base closure account, said Hammack. She said the request represents a 34 percent decrease from the fiscal year 2013 request.

Hammack said BRAC property conveyance, from



Headquarters, Army Materiel Command, moved to Redstone Arsenal, Ala., via congressionally approved 2005 Army Base Realignment and Closure recommendations.

prior rounds of BRAC, remains an Army priority.

"Putting excess property back into productive reuse can facilitate job creation, help communities building the local tax base and generate revenue," she said. "In total, the Army has conveyed almost 78 percent of the total prior BRAC acreage."

Hammack said the Army also requests \$15.2 billion for installation energy and environmental programs, facility sustainment restoration and modernization and base operating support.

"With the fiscal challenges we are facing, the Army has closely reviewed the facility investments to determine the level of resources needed to support the force," Hammack said. "Supporting the force requires appropriate facilities, training ranges, maintenance and operations. And that's where we have focused."

Hammack said the most important aspect of the Army is its human element.

"The Army's strength is our Soldiers, families and Army civilians who support them," she said. "They are and will continue to be the centerpiece for the Army." John Conger, the acting deputy undersecretary of defense for Installations and Environment, testified that a BRAC round is needed for fiscal year 2015, but it must be executed in a careful manner that does not affect the warfighter.

"The department is facing a serious problem created by the tension caused by declining budgets, reductions in force structure, and limited flexibility to adapt our infrastructure accordingly," he testified.

Army sees efficient energy usage as mission critical

WASHINGTON (Army

News Service) – The Army is implementing ways to use energy more efficiently to protect Soldiers, conserve resources and enhance mission capabilities.

"Energy is mission critical. It is a vulnerability. It is a risk," said Katherine Hammack, assistant secretary of the Army for Installations, Energy and Environment.

"Right now, one in every 46 convoys in Afghanistan suffers a casualty," she said April 10, at a panel discussion on sustainable energy and national defense.

She told the audience at the George Washington University Law School that an estimated 20 percent of the casualties in Afghanistan occur during logistics resupply missions.

"It is a risk to our Soldiers as well as a risk to our operations," said Hammack.

"One key element in improving our energy security is to change our doctrine, change our materiel solutions, our policies and our procurement decisions to modify the way we use energy, while at the same time increasing mission capabilities," she said.

Hammack said the Army has taken energy-efficiency technologies and renewable energy projects into theater, including at remote forward operating bases that are resupplied through aerial missions.

She noted that in one remote post, Soldiers had to stop all operations, come down from the



Army photo

Katherine Hammack, assistant secretary of the Army for Installations, Energy and Environment, said at an April panel discussion in Washington, that effective use of energy increases mission capabilities.

mountaintop and secure a safe area to receive an airdrop of supplies in what she described as a high-risk mission. But she said when the resources were conserved, those resupply missions happened less often, Soldiers stayed focused on operations instead of resupply, and assets could be deployed elsewhere.

Hammack said the Army has a program that encourages the private sector to install alternative energy on bases in the U.S., and then the Army buys the energy. She described that as a "win-win" situation. Hammack said to date, the Army has secured about \$1.5 billion in third-party investments on Army bases.

"We are ahead of the rest of the federal sector in using energy performance contracts," she said. "We are on track to meet our energy efficiency targets. We are on track to make our renewable energy projects and that is through leveraging the private sector interests – not the taxpayer – and paying for it out of existing budgets."

She said several Army bases are working toward being "Net Zero" in the areas of energy, water and waste by 2020.

"Technology and new techniques can work to make you more mission effective," she said. "It is a high priority to the Army to become less resource dependent, to increase our mission capabilities and increase our agility.

"We believe that what we're doing here can be models to communities, to cities, to universities, to other large areas where you have control over your infrastructure to better manage it so that it can be a better resource to the communities and the surroundings," she said.

Local Asian American Pacific Islander Heritage Month ceremony set for May

AAPIs as they

continue to

embrace the

The "Asian/

American"

designation

encompasses

American

dream.

Pacific

his year, Lt. Gen. Thomas Bostick, commander, U. S. Army Corps of Engineers, is scheduled as the guest speaker for the Asian Pacific American Heritage Month ceremony, 10 a.m., May 29 at Bob Jones Auditorium, Redstone Arsenal, Ala.

This year's theme is *Building Leadership; Embracing Cultural values and inclusion.* The annual celebration focuses on the contributions of millions of AAPIs to the American story and reminds us of the unique and emerging challenges facing



Bostick

more than 50 ethnic or language groups including native Hawaiians and other Pacific Islanders.

According to the latest census, there are now more Asian and Pacific

Islander groups than in the past with 28 Asian and 19 Pacific Island subgroups representing a vast array of languages and cultures.

These groups include Chinese Americans, Filipino Americans, Japanese Americans, Korean Americans, Vietnamese Americans, Asian Indian Americans, Laotian Americans, Cambodian Americans, Hmong Americans, Thai Americans, Pakistani, Samoan, Guamanian and many other language groups.

Center employees bring children to work

By Jo Anita Miley Public Affairs Office

pril 25 marked the 20th anniversary of national *Take Your Daughters and Sons to Work Day.* Huntsville Center participated in the annual event sponsored by the *Take our Daughters and Sons to Work* Foundation.

More than 35 Huntsville Center employees from various offices throughout the organization allowed their children ages 5 to 16 to "shadow" them while they performed their jobs during the day.

The Center's Executive Office employees Martha Cook, Gail Overman and Nancy Wilburn coordinated the mentoring activity.

According to the *Take Our Daughters and Sons* to Work Foundation, the purpose of the day is to empower children to plan for the future and to help them understand the value of a good education. The annual event was first created for girls in 1993 by the Ms. Foundation for Women. The initial purpose of the day was to help increase self-esteem in young girls while exposing them to future career options. A decade later, boys started joining their parents at work on this day.

AArmy Corps of Engineers – Information Technology desktop support technician, John LaPietra said he participated in the event to show his



Photo by Jo Anita Miley

John LaPietra, a desktop support technician in the Center's ACE Information Technology group, explains how a keyboard works to twins Ethan and Adan.

6-year-old sons, Ethan and Adan what he does on his job. He enjoyed taking them around with him while he took care of support calls throughout Huntsville Center.

"They're having so much fun watching me go about my day taking care of computer issues," LaPietra said. "They are only 6 years old, so this is actually their first *Take Your Daughter and Son to Work Day*. I hope to have an opportunity to bring them again next year."

Redstone Arsenal Victim Advocate Program team members visit Huntsville Center

By Jo Anita Miley **Public Affairs Office**

he Army launched its official recognition of National Sexual Assault Awareness and Prevention Month April 5, with the announcement of a new theme, "We own it, we'll solve it, together," meant to convey how the service hopes to eradicate sexual assault within the ranks.

Perrar Joseph and Jeronica Frierson, victim advocates for the Army Community Service Sexual Assault and Domestic Violence Program came to Huntsville Center Apr. 23 to provide information about sexual assault and educate employees on how to prevent sexual violence.

Angela Morton, chief of the Center's Equal Employment Opportunity Office and Sonja Rice, equal employment specialist, were also available to answer questions and provide information.

Joseph said this was his team's first visit to Huntsville Center. The decision to visit is part of an effort to serve local government organizations not physically located on Redstone Arsenal.

"Sometimes employees think they cannot get help on base because their organization is located off base - out of sight, out of mind. We are working diligently to change this perception. We have services to help everyone."

According to Joseph, the over-arching goal for the Sexual Harassment/Assault Prevention and Response Program is to reduce the stigma of reporting and increase prevention, investigation and prosecution capabilities while



Photo by William S. Farrow

Huntsville Center Equal Employment Opportunity employees, Sonja Rice and Angela Morton gather information from Redstone Arsenal Army Community Service Sexual Assault and Domestic Violence Program victim advocates Perrar Joseph and Jeronica Frierson, Apr. 23.

ensuring protection of sexual assault survivors from retaliation and threats.

The team also provided material about child abuse awareness, stress relief, financial management, autism, and other ACS services.

Joseph said they focused on child abuse prevention during the visit because some employees may not know April is also National Child Abuse and Neglect Awareness Month.

Providing support for parents at risk for child abuse is critical to protecting children and ending the cycle of abuse," Joseph said. "One case of child abuse or neglect is one too many."

Joseph stressed the importance of victims seeking help from the appropriate sources.

Since Redstone is such a small community, sometimes privacy may become an issue. This is why victims who may feel uncomfortable reporting an incident to Redstone authorities can seek help from a non-military resource, Crisis Center of North Alabama.

"What is important is that they seek help. So we want to make every resource possible available to them," Joseph said. "We are working to support survivors and prevent sexual violence. We have to get the word out that no one has to go through a sexual assault alone."

To report incidents of sexual assault, domestic violence and child abuse, contact the Redstone ACS 24/7 Hotline at 256-508-6613 or Crisis Center of North Alabama at 24/7 Hotline at 256-716-1000.

Ethics Corner:

Recent legislative developments affecting ethics laws

By Clay Weisenberger Office of Counsel

n the past year, Congress has passed a few new laws that affect ethics in Executive Branch agencies, and has considered several new restrictions on government conferences and travel.

Given the economic climate and recent abuses of government funds, there is every reason to believe that more ethics laws and regulations are on the way in 2013.

Hatch Act Modernization Act of 2012

Signed by President Obama Dec. 28, the Hatch Act Modernization Act made reforms to the Hatch Act, which limits certain political activity of most Executive Branch employees. The Hatch Act Modernization Act broadens the range of potential discipline when a violation is found. An employee or individual who violates the Act may now be subject to removal, reduction in grade, debarment from federal employment for a period not to exceed five years, suspension, reprimand, or an assessment of a civil penalty not to exceed \$1,000.

Travel and Conference Spending Restrictions

On March 26, the president signed into law the Consolidated and Further Continuing Appropriations Act of 2013, which includes a provision requiring the head of each Executive Branch agency to submit an annual report to the Inspector General that lists costs and contracting procedures related to each conference over \$10,000.

For conferences that cost more than \$20,000, the law requires that, within 15 days of a conference, the agency head notify the Inspector General of the date, location and number of employees attending such conference.

Congress did not pass the Government Spending and Accountability Act of 2012 ("GSA Act"). The GSA Act would have capped spending on any single conference at \$500,000 and required online posting of all conference information, including an itemized list of expenses and a brief explanation of how a conference advances an agency's mission. In addition, the Act would have limited travel spending in Executive Branch agencies for fiscal years 2013 to 2017 to 70 percent of agency spending levels for travel in fiscal year 2010.

Eleven other bills were introduced with similar provisions, including four appropriations bills. While the 2012 GSA Act and some of its spending counterparts were unsuccessful, the volume of bills moving through both chambers is a clear signal that Congress is concerned about reining in agency conference and travel spending.

As always, if you have an ethics question, call me at (256) 895-1140 or e-mail to clay.weisenberger@usace. army.mil before you act.

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