US Army Corps of Engineers®

Huntsville Center

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Reminder ...

Organization Day Awards Ceremony, picnic is June 8 at Hudson Recreation Area on Redstone Arsenal.

On the inside ...

Bostick assumes command

WASHINGTON—Lt. Gen. Thomas P. Bostick became the 53rd U.S. Army Corps of Engineers commanding general and U.S. Army chief of engineers during an assumption of command ceremony May 22 at Baruch Auditorium, Fort Lesley J. McNair.

Army Vice Chief of Staff Gen. Lloyd J. Austin III hosted the event.

"I absolutely believe Lt. Gen. Bostick is the right person to lead the Army Corps of Engineers," Austin said during his remarks. "He is one of the smartest, most gifted general officers of our time, with the ability to do well and thrive in any environment."

At USACE, Bostick serves as the senior military officer overseeing most of the nation's civil works infrastructure and military construction. He is responsible for more than 37,000 civilian employees and 600 military personnel who provide project management and construction support to 250 Army and Air Force installations in more than 100 countries around the world.

Bostick also oversees USACE's diverse missions such as hundreds of environmental protection projects; the regulatory permit program to protect, restore and enhance thousands of acres of wetlands; and the emergency response mission to support the Federal Emergency Management Agency.

Photo by Dana Clark

Lt. Gen. Thomas P. Bostick addresses the audience after assuming the role as the U.S. Army Corps of Engineers commanding general and chief of engineers during a ceremony at Fort Lesley J. McNair, May 22.

In addition, as the chief of engineers, Bostick advises the Army on engineering matters and serves as the Army's topographer and the proponent for real estate and other related engineering programs.

"Now, more than ever, the nation needs a lean, agile, strong, capable, competent and trusted Corps of Engineers. One that serves the Army and nation; and one that truly teams with our many military, federal, state, local government, host nation governments, tribal, academia, industry and non-government partners to solve the engineering and scientific challenges facing the joint force, the nation and the global community," Bostick said.

"I'm committed to working with all our partners to continue the rich traditions of the Corps, meet the needs of this country and always deliver," he added.

Commander's thoughts

Team,

June is a very important month for many reasons. We'll have our Engineer Day Awards Ceremony and picnic June 8 starting at 10 a.m. at the Carroll Hudson Recreation Area on Redstone Arsenal. The day serves as the celebration of the Corps of Engineers, which was first authorized by the Continental Congress as the "Chief Engineer for the Army" on June 16, 1775.

The Corps of Engineers as it is known today came into being on March 16, 1802, when the president was authorized to "organize and establish a Corps of Engineers ... that the said Corps ... shall be stationed at West Point in the State of New York and shall constitute a Military Academy."

June 8 is also a day to celebrate our hard work all year and recognize some of the many talented, dedicated employees at the Huntsville Center when we present the Engineer Day Awards. Each year the request for nominations goes out to the work force, asking employees to nominate individuals in 12 categories from Volunteer of the Year t and Distinguished Civilian Employee. This year two new award categories were added: Commander's Diversity Award and Commander's Diversity Leadership Award.

I would like to take it one step further and say that on June 8 we are also celebrating the Army's birthday. The U.S. Army was founded on June 14, 1775, when the Continental Congress authorized enlistment of riflemen to serve the United Colonies for one year. For more on the history of the U.S. Army birthday, you can go to the web at: http://www.history.army.mil/html/faq/birth.html

Whether in uniform or a Department of the Army civilian, we are all "in" the Army and the work we do supports the warfighters and their families.

June is also important to me because it is my last full month as commander of the Huntsville Center. When I took command in 2009, I thought I had a good idea of what the Huntsville Center was all about. I quickly learned that it's hard to understand Huntsville Center unless you are actively involved in the day-to-day missions. The work you do here has worldwide impact. The mission areas are diverse, and there is huge opportunity to make a positive impact for our Army and our nation. Here it is, three years later. Now that I finally understand all the important work you do here, it's time to leave. I can't begin to express what an honor it has been to command the Huntsville Center.

June 4-8, Col. Robert Ruch, who will become the Huntsville Center commander July 26, will be making a transition visit to the Center. He was also here for the Command Strategic Review.

Col. Nello L. Tortora

June 6-7, Maj. Gen. Todd Semonite, who became the new USACE deputy commander May 21, will visit the Center and give us an opportunity to brief him on what we do.

Lt. Gen. Thomas Bostick became the 53rd Chief of Engineers and Commander of the U.S. Army Corps of Engineers May 22 at Headquarters, USACE. As he gets settled in, he'll start making the rounds to the various USACE organizations. Planning is under way for his visit to Huntsville

See *COMMANDER* on page 5

Hails and farewells

Hail: **Casey Thompson**, Executive Office, **Jennifer Sabourin**, Public Affairs Office; **Bradley Brock**, **Franklin Lum**, **Marlon Butler**, **Tobias Maples**, Engineering Directorate; **Orie Cecil**, Ordnance and Explosives Directorate; **Bill Veith**, Envirinmental and Munitions Center of Expertise.
Farewell: **Paul Dudek**, Chemical Demilitarization Directorate, **Darrell Davis**, Resource Management Office; **Nathan Taylor**, CT; **Elizabeth Davis**, **Kim Phillips** (deployment), ED.

US Army Corps of Engineers

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BULLETIN

Commander..... *Col. Nello Tortora*
Chief, Public Affairs..... *Debra Valine*
Editor..... *William S. Farrow*

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The Bulletin asks:

"What would you like to hear from the incoming Chief of Engineers and the Commander of the United States Army Corps of Engineers, Lt. Gen. Thomas P. Bostick?"

"I would like to hear how he thinks the role of the USACE will changing in the next few years, for the uniformed and civilian personnel. With the draw down of the troops on two war fronts, the downsizing of our forces, the BRACs and the budget cuts, how will this affect our mission? Does he anticipate more work coming toward civilians with the upcoming BRAC to gear up for the troop movement? How will this affect the energy programs that the garrisons have implemented to reach their 30 percent goal by 2015?"

Wesley Malone
Installation Support and Program Management Directorate

"Our Huntsville Center IPLAN directly supports the current USACE Campaign Plan Goals and Objectives, so I am interested in hearing Lt. Gen. Bostick's thoughts on these current Campaign Plan Goals and Objectives."

Matt Knox
Business Management Office

Preventing slips, trips and falls in the workplace

According Huntsville Center's Safety Office, slips, trips and falls are still the leading cause of injury in our workplace for FY12. To prevent falls and to make our workplace safer, follow these simple steps: When using stairs, use the handrails. Remove tripping hazards from walkways. Take your time, pay attention to where you are going. Wear shoes with good support and slip-resistant soles. Clean spills immediately. Don't lay cables or cords across walkways, but if needed, (i.e., telephone cords used in our conference rooms) cover them with an appropriate device. Never use chairs, tables to reach items--ask for help or use a ladder. Stay fit and flexible--exercise can help reduce falls by improving strength and balance. For more regarding Army safety initiatives, visit https://safety.army.mil/

Employee Spotlight: David Broyles

By Jo Anita Miley
Public Affairs Office

Where do you work and what is your job title?

Installation Support and Programs Management Directorate project manager/planner.

How long have you worked for the Corps?

About six years. I also have 20 years of federal service with various U.S. Army Garrison Public Works.

In your own words, what is your job? What do you do?

I lead efforts to provide programmatic level, facility planning and programming services in support of military construction projects for military installations across the globe. In addition, I serve as lead coordinator among clients, customers, stakeholders and executing support contractors to promote quality coordination that enhances planning/product quality.

Review the Campaign Plan goals and objectives. Which one(s) apply to you?

Specifically, Goal 3, Objective 3a, which is to deliver sustainable infrastructure via consistent and effective military construction. Programming and planning services range from production of facility and infrastructure requirements analysis, real property master planning support, area development planning and planning charrettes.

Broyles

For me, delivering sustainable and reliable infrastructure and keeping customers happy is very important to the Center and directly relates to our livelihood and future existence.

How do you see your job making a difference and contributing to the Corps' success?

Providing facility planning positively contributes to the Corps goals to design and execute facility construction projects.

What do you love about your job?

Simply when I know that planning and programming products provided graduates to project execution which in the end supports Soldiers, Families and the installation communities.

Any special moments/memories about your job you'd like to share?

More than two years ago, I was called upon to lead a planning charrette (programming) action at Fort Belvoir, Va. in support of a BRAC facility requirement that was not yet a programmed or budgeted for project execution. There was an urgency to develop a full DD Form 1391 as soon as possible.

A project had to programmed/budgeted/executed and completed, ready for occupancy by mid September 2012. I lead a meeting effort for the entire team. During the meeting, every issue was resolved and project scope, justification and costs were documented. Our effort resulted in a full DD Form 1391 programming document to support the Headquarters, Department of the Army budgeting process; followed by immediate design and construction authorization.

The ***Employee Spotlight*** is intended to let our Center employees shine for positively impacting our organization through mission achievements. Employees are nominated on a monthly basis and are featured monthly on the Huntsville Center Web site. 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.**

Two hundred and thirty-six years ago, the United States Army was established to defend our Nation. From the Revolutionary War to the current operations taking place around the world, our Soldiers remain Army Strong with a deep commitment to our core values and beliefs.

This 236th birthday commemorates America's Army – Soldiers, Families and Civilians – who are achieving a level of excellence that is truly Army Strong.

Being Army Strong goes beyond physical endurance and mental preparedness. It encompasses an indomitable spirit, and high ethical and moral values.

These are not only desirable traits in a person, but in a Nation that wishes to live up to the ideals and vision of its founders.

We are "America's Army: The Strength of the Nation."

Engineer Day Awards Ceremony. picnic set for June 8

Two days after the creation of the U.S. Army on June 14, 1775, General George Washington appointed the first engineer officers to the Army.

Huntsville Center sets a date in early June to celebrate the establishment of the Corps of Engineers with the Huntsville Center Engineer Day picnic and awards ceremony.

This year's event is set for June 8 at the Carroll D. Hudson Recreation Area on Redstone Arsenal. The Hudson Recreation Area is located at the southern end of Patton Road and overlooks the Tennessee River.

The 10 a.m. award ceremony kicks-off the day's events. Following the award ceremony, lunch will be served. This year, lunch is catered by Joe Mo's Ba-Ba-Que offering chicken plates for $5 and pork plates for $6. Sides available are baked beans, potato salad, cole slaw and chips.

There is an optional kid's meal with hot dog, chips and a drink for $3. Tickets are now on sale through June 1.

If barbecue is not your thing, people can bring their own lunches. Although beverages are provided, attendees should ensure they bring plenty of bottled water. Activities following lunch include horse shoes, corn hole, flag-football, basketball and organized volleyball and softball tournaments. A dunking booth will be available with three balls available for $5. All proceeds go to Huntsville Center Activity Association's coffer.

There is also a playground for the children and sprinklers are expected to be set up to help beat the heat. Attendees are also encouraged to bring lawn chairs. For more information regarding the picnic, contact Lequita Byrd-Craig at 256-895-1353. (*Information compiled from staff notes.*)

COMMANDER

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Center; we are just waiting for the date.

In May, we celebrated Asian American, Pacific Islander Heritage Month with an excellent event in our cafeteria. Guest speaker Seunghee Lee, Chief Safety Officer, Safety and Mission Assurance Directorate at NASA Marshall Space Flight Center, Luz Tolentino-Ladrillono, an accomplished Filipino vocalist and actress, and Filipino and Tahitian dance demonstration by Lezith Benton from the Philippine-American Association of Alabama, all helped us celebrate "Striving for Excellence in Leadership, Diversity and Inclusion." Thanks to the Special Emphasis Program Committee for coordinating the event.

Memorial Day kicked off the official summer season. Our Safety Office has been sending out reminders on how to stay safe in hot weather, on motorcycles, etc. Please read those and be aware of potential heat-related injuries.

As always, thank you for all you do to make Huntsville Center great.

Army launches new resource for Army civilian training, leader development

WASHINGTON – To improve access to information and increase participation in Army Civilian training and leader development opportunities, the Army G-3/5/7 Training Directorate's Civilian Training and Leader Development Division launched a one-stop Web site consolidating information about career program occupational and functional training, competitive professional development and leader development opportunities, as well as application procedures and course registration links.

The site at **www.civiliantraining.army.mil** serves as an integrated resource for civilian employees, supervisors and Army leaders interested in learning more about the training and opportunities available to the Army Civilian Corps.

Since several Army organizations administer the various leader development courses, developmental assignments and training, Army civilians and supervisors have in the past had to visit several different sites to find out about mandatory training and professional development opportunities.

"We wanted to provide civilians and supervisors a comprehensive site to help them more easily navigate the myriad opportunities in Army civilian training and leader development," said Vicki Brown, chief of the Civilian Training and Leader Development Division.

"It's our goal to ensure all civilians know about the available training, often at little or no cost to their units, and take advantage of the training that fits into their individual career goals and supports their organization outcomes."

The updated Web site includes course descriptions, prerequisites and registration links for Army Civilian Education System, or CES, courses, Supervisor Development Course requirements, Competitive Professional Development and Academic Degree Training, advanced opportunities like Senior Service College, Army Congressional Fellowship Program and the Defense Senior Leadership Development Program, as well as career management tools like Army Career Tracker.

The Civilian Training and Leader Development Catalog (when fully deployed on the site) will be the official resource for information on centrally managed civilian training, professional and leader development training opportunities, replacing the information currently found in the Army Civilian Training, Education and Development System catalog.

Guidance clarifies contracting regulation

In response to findings by the Department of Defense Inspector General, USACE recently issued formal guidance on delegated contracting authority and compliance with the federal acquisition regulation and its supplements.

This guidance provides greater clarity regarding who can bind the government and who may make changes to the terms and conditions of a contract.

In July, 2011, Brig. Gen.Theodore Harrison, then Director of the U.S. Army Corps of Engineers National Contracting Organization, signed Procurement Instruction Letter 2011-12. The PIL reasserts that only the contracting officers may bind the government and only to the extent of the authority specifically delegated to them in their warrant.

Contracting officers alone may enter into, administer, or terminate contracts, and make recommendations and findings. Further, all contract actions must comply with the FAR, the Defense Federal Acquisition Regulation Supplement, the Army Federal Acquisition Regulation Supplement, and all other requirements of law, executive orders, other regulations.

The PIL requires that all contract award letters, issued by USACE include the following statement:

"Only a warranted contracting officer (either a procuring contracting officer, or an administrative contracting officer, acting within their delegated limits, has the authority to issue modifications or otherwise change the terms and conditions of this contract. If an individual other than the contracting officer attempts to make changes to the terms and conditions of this contract, you shall not proceed with the change and shall immediately notify the contracting officer."

This language ensures that all parties to the contract, those administering the contract, and individuals providing oversight on the contract have clear guidance on who may change terms and conditions of the contract.

The PIL also requires this statement be read to the contractor at the post-award conference by a USACE official, preferably by the Contracting Officer in a face-to-face meeting or on a telephone call. Lastly, the names and contact information for the contracting officer and the ACO (if one has been appointed) shall be provided to the contractor.

Should you have questions related to contracting officer authority, contact Mona Neal, CT Oversight and Operations Division, at 256-895-1226. (*Information provided by Center Contracting Directorate*)

Burgess graduates acquisitions fellowship

Jeff Burgess, Huntsville Center Contracting Directorate's Facilities Support Branch chief contracting officer, was one of 11 members who recently graduated from the Competitive Development Group/ Army Acquisition Fellowship program during the CDG/AAF Orientation, Induction, and Graduation events recently hosted by the U.S. Army Acquisition Support Center, Redstone Arsenal.

The event served as the capstone event for the program that also saw eight civilian members of the Army acquisition corps introduced into the fellowship.

Burgess said hard work with diverse experiences in contracting and completing various levels of contracting certifications made him competitive for the selection as a fellow.

Burgess

"I had worked spare parts, commodities, GSA orders, services and major weapons systems," Burgess said. "I had already earned my level III certification in contracting, a level II in program management, and a level I in logistics. Since the CDG Program was an opportunity to get a level III in program management, the fact that I already had shown the initiative to get multiple certifications demonstrated my commitment to the idea of cross-training in multiple career fields."

CDG/AAF is a three-year program that offers developmental assignments in Program Executive Offices, Assistant Secretary of the Army for Acquisition, Logistics, and Technology offices, U.S. Army Materiel Command headquarters and functional organizations. The program provides expanded training, leadership, experiential, and other career development opportunities.

Burgess said he learned a great deal from the program, but he said he believes the most important thing he takes from the fellowship experience is a greater understanding of the acquisition process from the programmatic perspective.

"The outlook and attitudes of the program and project managers are very different from those of contracting," Burgess said.

"All of the various career fields have different responsibilities and different areas of focus. Those differences are difficult to understand and until you have actually worked on the program side of the process, I don't believe you can fully appreciate that perspective. "

The three-day event opened with the orientation for the seven new YG12 members and covered basic administrative topics and program expectations.

Craig Spisak, USAASC director, opened the second day of the event, which was highlighted by a program management panel discussion.

The final day of the event featured remarks from Brig. Gen. Joseph Bass, Expeditionary Contracting Command commander, a question-and-answer panel consisting of previous members of the CDG/AAF program and a senior leader dialogue panel.

"I did not realize how reputable the program is and how many CDG graduates are in such highly visible positions within the Army," said Chenxi Dong-O'Malley, a Year Group 2012 CDG/AAF fellow and assistant product manager for Program Executive Office Soldier.

A dinner reception was held the final evening, which included the official induction and graduation ceremony.

(Bulletin editor William Farrow contributed to this article)

COMPETETIVE DEVELOPMENT GROUP/ ARMY ACQUISITION FELLOWSHIP

INCOMING YG12: Aladrian Crowder (Aberdeen Proving Ground, Md.), **Chenxi Dong-O'Malley** (Army Soldier System Center, Natick, Ma.), **Timothy Hoy** (Aberdeen), **Adam Morse** (National Capital Region), **Craig Riedel** (Tank Automotive Research Development Engineering Center, Warren, Mich.), **Stephen Roberts** (Huntsville), **Karen Short** (Huntsville), **Matthew Whitworth** (Huntsville).
GRADUATING YG09: Tamera Balch (Huntsville), **Alvin Bing** (TARDEC), **Jeff Burgess** (Huntsville), **Danny Davis** (Huntsville), **Peter Degenaar** (Huntsville), **Gloria Hemphill** (Huntsville), **Jeff Hensley** (Huntsville), **Ryan Johnson** (Picatinny Arsenal, N.J.), **Darold McCloud** (Huntsville), **Phillip McDonald** (Huntsville), **Joel Price** (Huntsville).

Army's largest solar array breaks ground

By Miriam Rodriguez
Missile Ranger Editor

WHITE SANDS MISSILE RANGE, N.M. — White Sands Missile Range leaders came out to break ground and to commemorate the start of a renewable energy project at the site of the new Solar Photo Voltaic Array Project, the Army's largest solar array, April 19 at WSMR.

A 42-acre tract of land located about 1/4 mile northeast of the Las Cruces Gate next to main post will be the site where 4.115 MW of single-axis, vertical azimuth-tracking, ground-mounted solar Photo Voltaic panels will be installed. Garrison Commander Col. Leo Pullar thanked T.A. Ladd and the employees at DPW for the great work that they have done to make this happen.

"It's a great day, exciting for us in the Army," he said. "It is obvious when you live here that this is the right place for (a solar array), here in New Mexico and here at WSMR. Folks coming down the hill will get to see the work that goes on here every day and understand and see the Army's commitment to going green and to be net zero and doing what we can for the environment."

"We are very excited about this project. On behalf of the Corps of Engineers, I'd like to thank everybody for coming," Irby said. "You've put together a great team under the leadership of Brig. Gen. John Ferrari, Col. Leo Pullar, T.A. Ladd, Irene Beck and Craig Collins from DPW.

"You've got a great project here. Our partners in this, Siemens, have put together about two years worth of work to get to this point. So we are very happy to be here and break ground on this project. This will be the largest PV Array in the Army. We are very excited about that."

In conjunction with the 4.115 MW project, WSMR will also be installing a 350 kW solar PV Carport at the parking lot for the Headquarters Building 100.

Courtesy U.S. Dept. of Energy

Vertical azimuth-tracking, ground-mounted solar Photo Voltaic panels will be installed at a location near the White Sands Missile Range Las Cruces Gate.

The estimated energy generated in year one is 9,757,130 kWh for the 4.115 MW solar array and 602,561 kWh for the 350 kW solar carport for a grand total of 10,359,691 kWh, which is approximately 10 percent of WSMR's total annual energy consumption.

All energy generated from the project will be consumed by WSMR with none being sold to the local utility company.

Clearing of the solar farm site has begun and solar panel construction began in April 2012 with an estimated completion date of December 2012. The ground-mounted solar array will have an annual savings of $875,989 while the solar carport will save $54,098 annually. The total cost of both projects is $16.8 million with a cost of $3.77 per Watt.

The solar project is being funded within an Energy Savings Performance Contract (ESPC) utilizing an Energy Services Agreement (ESA) that the Huntsville Army Corp of Engineers (COE) has awarded to Siemens on behalf of WSMR. Under the awarded task order, Siemens will maintain and operate the equipment and will provide the energy to WSMR. This agreement is for a period of 25 years. The simple payback is 18.1 years. The energy being provided will cost the same that WSMR is currently paying the local utility company which is a blended rate of $0.08/kWh. The Army will own the Renewable Energy Credits (RECs).

They will NOT be sold to help finance this project therefore; they can be used towards meeting Federal Renewable Energy Mandates.

Army, Air Force mount renewable energy push

Services innovative plans include biofuel, point-of-use energy production

By Amaani Lyle
American Forces Press Service

Photo by Dawn Waldman

Construction workers attach a solar panel to a stand at Edwards Air Force Base, Calif., Feb. 2, 2012. This is one of three, one-megawatt solar arrays that are now complete and producing power.

WASHINGTON – The Army and Air Force are committed to developing one billion watts of renewable energy on their installations by 2025, senior leaders from both services announced yesterday.

The plan marks the latest milestone in a multi-year endeavor to find ways to make the military more energy efficient, said Katherine Hammack, assistant secretary of the Army for installations, energy and environment, and Terry Yonkers, assistant secretary of the Air Force for installations, environment and logistics.

One gigawatt, a unit of power equal to one billion watts, can power about 250,000 homes, Hammack explained.

Energy security drives the initiatives, Hammack said, adding that increased usage of renewable energy -- such as solar power -- on military installations would enable them to operate even if local power grids go down.

"Right now, the bases operate off of a nationwide electric grid, which, as populations grow, is getting aged and vulnerable," Hammack said.

"This is a move toward distributed energy where you're generating [it] at the point of use."

The Army Corps of Engineers will work with the two services to assess land and resources and to determine energy transmission capabilities, Hammack said.

As the technology develops, she said, renewable energy steps will include the installation of solar paneling on military base buildings and vehicle garages, and dual-usage of the panels as land buffers.

Biofuels will be a behind-the-scenes game changer for the Air Force, according to Yonkers, who lauded the seminal research of alternative fuels at Wright-Patterson Air Force Base, Ohio.

"These biofuels don't produce the kind of soot that conventional crude oil-derived fuels produce," Yonkers said, adding that this results in a cooler-running engine, which reduces metal fatigue and increases engine life.

"If you can reduce the temperature in the combustion chamber of an engine by as little as a hundred degrees, you can get 10,000 hours or more on those parts that compose that engine," Yonkers said.

As the United States continues to seek ways to reduce dependency on imported oil, biofuels could play a large part in the transition while reducing the cost to taxpayers, he said.

"Maintenance costs will go down substantially. We can keep those engines on[-line] much longer and the overall cost of doing business with the Air Force goes down," Yonkers said.

Private sector financing will be the linchpin of the services' energy endeavors through power purchase agreements, enhanced use leasing, energy savings performance contracts and utility energy savings contracts, Yonkers explained.

New sources of clean energy will vary among installations, he said, and will include solar, wind, biomass and geothermal developments.

The desired end result of these advances, Yonkers said, is to "reduce demand, increase supply and change the culture of how airmen and soldiers consider energy."

The Army will host the Army-Air Force Energy Forum July 12 in Arlington, Va.

Experts work at taming radiation risks

By James Campbell
Public Affairs Office

In March 2011, the Tohuku earthquake and tsunami led to a catastrophe at the Fukushima Daiichi nuclear power plant in Japan and during the resulting recovery assistance provided by the U.S., two scientists from the Huntsville Center got involved.

Protecting people and the environment from existing and potential radiation hazards is the mission of health physicists Julie Clements and Brian Hearty, from the Center's Environmental and Munitions Center of Expertise in Omaha, Neb.

Having the capability to advise senior leaders on radiation issues became important immediately after the Fukushima Daiichi disaster.

"We had to be in a position to respond if asked. We were preparing health physics fact sheets, providing any assistance we could, and answering lots of phone calls," said Clements, the U.S. Army Corps of Engineers appointed Radiation Safety Staff Officer.

Clements also traveled to California at the request of Omaha District to assist with the decontamination of two U.S. Navy ships that had been deployed to assist Japan during the disaster.

"I went out to get the contractor up and running. We had to make sure they had appropriate survey equipment, record keeping and instruments," she said.

"We also checked to ensure the cleanup criteria were adequate, and measures were in place to prevent inadvertent spreading of any contamination discovered."

The power of the atom is spectacular, but along with the benefit of its use, there is the inherent risk of radiation.

Radiation has existed everywhere in the environment since the Earth's formation. It is in rocks, soil, water, and plants. Human mining and processing of naturally-occurring radioactive materials for use in power generation, medicine, industry and even consumer products generates emissions and waste.

Photo by Brian Hearty .

Julie Clements sample soil for depleted uranium at Eglin Air Force Base, Fla.

Three deactivated Army nuclear power plants are also part of the EM CX health physicists' work.

The deactivated plants are permitted to the U.S. Army Corps of Engineers -- two at military installations and one on a barge -- were used to generate electricity and have been deactivated since the 1970s, with the fuel and a majority of the other radioactive waste properly removed, Hearty said.

What remains are the primary components of the various nuclear power generation systems, things the Corps has wanted to safely dismantle and dispose of in an appropriate low-level radiation waste site for nearly four decades.

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"When we're helping with this process, providing research and advice, we're keeping track of changes in radioactive waste disposal options, licenses, and sites that are still accepting waste," Hearty said.

The questions of how much it will cost, when is the best time to move forward with dismantling, and where the remnants of the three reactors can be safely stored are questions Hearty said take up much of his time.

Mitigating the risk of radiation hazards, sometimes buried in the past, is also a major part of the mission for Clements and Hearty.

The Formerly Utilized Sites Remedial Action Program, commonly abbreviated FUSRAP, which was initiated by the Department of Energy in 1974 to identify, investigate and clean up or control sites throughout the United States that became contaminated as a result of the early U.S. atomic energy program starting in the 1940s. The Corps has been responsible for executing FUSRAP cleanup missions since October 1997.

"Much of what we do with FUSRAP is ensuring safe practices, techniques and providing radiation safety support to districts and contract companies doing the remediation work," said Hearty.

That work is complex, and involves radioactive waste. An ongoing project example is the Shallow Land Disposal Area FUSRAP site in Parks Township, Penn., where the Pittsburgh and Buffalo districts, contract firms and Huntsville Center are working through processes outlined in the Comprehensive Environmental Response, Compensation and Liability Act to carefully exhume, package and dispose of buried radioactive waste at offsite facilities, Hearty said.

In addition to supporting FUSRAP, routine work involves monitoring the condition of density gauges on dredges that use low-level radiation to monitor material flowing through large pipes or investigating radon levels and radon protection measures as workers tunnel through rock at a dam project, Clements said.

Radiation Safety Support Team members survey a firing range at Eglin Air Force Base, Fla.

Clements' work as RSSO also involves a myriad of compliance issues, coordinating with other federal agencies, and performing Radiation Protection Audits at locations holding a U.S. Nuclear Regulatory Commission licenses or U.S. Army Radiation Authorizations.

From Fukushima to FUSRAP to keeping track of necessary forms and permits, Clements and Hearty are among a group of health physicists numbering fewer than 20 in the U.S. Army Corps of Engineers.

Working together as group across the Corps, and individually, they're guiding the plans and processes for dealing with natural and manmade radiation-- its benefits and its dangers.

Summer reminder: heat illness can be fatal

Working in an excessively hot environment can be difficult – and even fatal. Heat can create a number of safety problems and illnesses, including heat cramps, heat exhaustion and heat stroke, which can be fatal. These illnesses caused by too much heat are called hyperthermia.

Heat can also cause you to become inattentive, short-tempered, dizzy, and slow. All of these conditions can cause you to work in an unsafe manner.

Hot conditions can be caused by the weather or by the work situation itself, such as a laundry-room or a foundry. When the atmosphere is humid, the effects of the heat are compounded.

Warning signals of heat illness:

Heat Cramps. Heat cramps affects muscles such as those in the arms, legs and abdomen – the muscles which have been used while working. These cramps may occur after work, when the person is resting. Heat cramps are a signal that the body has lost too much salt through sweating.

Heat Exhaustion. Heat exhaustion is a serious condition that needs immediate attention. It may have any or all of these symptoms: A feeling of exhaustion, nausea, dizziness, pale and clammy skin, quick pulse, and low blood pressure. Heat exhaustion is also a warning that the mechanism which controls heat for the body has become seriously overtaxed. Heat stroke may follow if heat exhaustion is not treated.

Heat Stroke. Heat stroke is a serious matter and it can be fatal. It occurs when the body's heat control mechanism simply shuts down. Perspiration stops and the body temperature rises. The heart pounds and the skin becomes flushed and hot. This condition is a medical emergency and must be treated immediately.

Tips for preventing heat illness:

Get used to working in the heat gradually: For example, if the weather suddenly turns hot or you are transferred to a hot environment, take it easy until you are accustomed to the temperature.

Drink water often to avoid dehydration: The body loses water through perspiration, so you need to replenish it frequently. **Do not drink alcoholic beverages or caffeinated beverages (while exposed to heat)**: They will cause you to lose even more water and salt.

Take frequent rest breaks when working in hot conditions: These breaks can consist of moving to a cooler area or switching to lighter work for awhile.

Get a physician's advice before replacing salt: Particularly if your salt intake is restricted for medical reasons such as circulatory problems. The use of salt tablets is not recommended. Eating lightly salted food – before entering the work environment – may be a better idea. Also available are special drinks which are intended to replace the body's fluid and mineral levels.

Dress lightly: Layer clothes so that you can subtract or add clothing as the temperature changes. Be sure to shade the skin against the sun.

According to the Center for Disease Control, the best defense is prevention:

- Never leave anyone in a closed parked vehicle.
- Check regularly on infants and young children; people aged 65 or older; people who have a mental illness; those who are physically ill, especially with heart disease or high blood pressure.
- Visit adults at risk at least twice a day and closely watch them for signs of heat exhaustion or heat stroke.
- Infants and young children, of course, need much more frequent watching.

For more information and tips for preventing heat-related illness, go to the CDC link below:

http://www.bt.cdc.gov/disasters/extremeheat/heattips.asp

For information on how to prevent dehydration in children, go to the Safe Kids link below:

http://www.safekids.org/safety-basics/safety-resources-by-risk-area/sports-and-recreation/dehydration-and-heat-illness.html

(*Information provided by Huntsville Center Safety Office*)

Lightning dangers reality during storms

By William Eggleston
Safety Office

According to the Weather Channel, lightning kills or injures hundreds of people annually., mainly because the victims are not aware of the danger they face. Myths and misconceptions about lightning can add to the confusion. Take this short quiz from weather.com to test your lightning knowledge:

True or False?
Lightning always strikes the tallest object.
False. Lightning strikes the best conductor on the ground, not necessarily the tallest object. In some cases, the best conductor might be a human being.

True or False?
A car's rubber tires give protection from lightning.
False. Actually, the car itself is very well insulated and offers more protection than being outside in the storm. Of course, the exception to this is the convertible, which provides virtually no protection.

True or False?
Lightning never strikes the same place twice.
False. The Empire State Building is struck by lightning many times every year.

The first step to reduce the risk of being struck by lightning is education.

Sadly, many people don't realize the dangers of lightning. There are several ways to prepare yourself for a thunderstorm: keep a watchful eye to the sky, listen to a National Oceanic and Atmospheric Administration weather radio or local radio or television for current forecasts and watch for lightning flashes.
Lightning is the result of the build up and discharge of electrical energy.

If you can see lightning or hear thunder, you could be in the danger. You can tell how close you are to a lightning strike by counting the seconds between seeing the flash and hearing thunder. For every five seconds you count, the lighting is one mile away. If you can see a flash and instantly hear thunder, the lightning strike is very close and you should seek shelter immediately.

The two most common types of lightning are cloud-to-ground and intra-cloud. Cloud-to-ground lightning is the most dangerous form of lightning.

This type of lightning occurs during the dissipating stage of a thunderstorm. Intra-cloud lightning is the most common. It occurs between oppositely charged centers within the same cloud.

The 30/30 rule relates to the duration between the flash of lightning and clap of thunder, which describes the proximity of a storm cell.

It's used as a measure of the imminence of the storm and therefore as a denominator in deciding whether to suspend outdoor activities. The rule of thumb is that every three seconds of delay between a lightning flash and the audible thunder associated with the flash equates to a distance of approximately one kilometer. Accordingly, the 30 seconds flash-to-thunder time interval suggests that the lightning activity is approximately 10 kilometers away.

The safest location during a thunderstorm is inside a large enclosed structure, preferably with electrical/telephone wiring and plumbing (to provide a safe pathway to the ground for any current), but keeping away from doors, windows, metal fittings and devices connected to the electricity supply. Also, an enclosed metal vehicle (such as a car, van or bus) is a safe location if an enclosed structure isn't available.

Avoid unnecessary exposure to the lightning during thunderstorm activity. Follow safety recommendations to reduce the overall number of lightning casualties. An individual ultimately must take responsibility for his or her own safety and should take appropriate action when threatened by lightning.

A weather radio and the use of lightning detection data in conjunction with an action plan are prudent components of a lightning warning policy, especially when larger groups and/or longer evacuation times are involved.

The seemingly random nature of thunderstorms cannot guarantee an individual absolute protection from lightning strikes, however, being aware of, and following proven lightning safety guidelines can greatly reduce the risk of injury or death.

During thunderstorms, always remember to:

Listen to local news or NOAA Weather Radio for emergency updates.

- Postpone outdoor activities if thunderstorms are likely. Many people struck by lightning aren't in the area where rain is occurring.
- If a severe thunderstorm warning is issued, take shelter in a substantial building or in a vehicle with the windows closed.
- If you can hear thunder, you are close enough to be in danger from lightning. If thunder roars, go indoors! The National Weather Service recommends staying inside for at least 30 minutes after the last thunder clap.
- Avoid electrical equipment and telephones.
- Do not take a bath, shower or use plumbing.

Community relations sees frenzied pace

By William S. Farrow
Public Affairs Office

Lately it seems the phone on the desk of Jo Anita Miley won't stop ringing with requests from school administrators looking for Huntsville Center representatives to engage their students.

Miley, Huntsville Center public affairs specialist and Center community relations coordinator, said the program she oversees is perfect for allowing engineers and other technically skilled Center representatives express the need for students to take the high road when it comes to their education.

"Basically we're providing the students with information regarding career awareness," Miley said. "We're allowing our employees to talk to the students and explain the importance of education and explaining what many careers there are within the Corps of Engineers and the U.S. Government."

Miley said some of the events fall under the National Science Technology Engineering and Math Awareness program which creates a climate for improving educational opportunities for all students, and encourages an increased awareness and interest in science, technology, engineering and math.

Miley said she sees an increase in school's requests as the academic year is ending so many of the events are set in May and June.

Community relations efforts in May included: Junior Achievement in a Day at Whitesburg Elementary School on May 8; Team Redstone Career Tour on May 10; Career Day at Lakewood Elementary School on May 17 and Junior Achievement Young Minds at Work Career Awareness tour May 22.

According to Miley the Center's involvement in the upcoming Oakwood University's Pre-College Summer STEM Academy on June 8 will push the number of students reached by Huntsville Center personnel to more than 700 over a two month period..

The students are all local and range from kindergarten to college.

Melayna Cumming, a 7th grader from Buckhorn Middle School who participated in the May 22 event, said she felt it was important to participate in the Young Minds at Work Career Awareness Tour to learn more about different types of jobs.

"It's great to speak with some of the people in the Corp's who have done certain jobs for a long time, she said. "This information can help me decide what I want to do (for education or a career) later."

Photo by William S. Farrow

Boyce Ross, Engineering Directorate chief, addresses students from the May 22 Junior Achievement *Young Minds at Work Career Awareness* tour.

Photo by Jo Anita Miley

Geordelle Charles, Center Contracting Directorate, interacts with students during career day at Lakewood Elementary School May 17.

Center celebrates Asian American, Pacific Islander heritage with observance

By James Campbell
Public Affairs Office

The U.S. Army Engineering and Support Center, Huntsville held its Asian American and Pacific Islander Heritage Month observance May 9.

A standing-room only crowd gathered in the cafeteria for an hour-long event featuring guest speaker Seunghee Lee, Safety Office chief, Safety and Mission Assurance Directorate at NASA Marshall Space Flight Center, Luz Tolentino-Ladrillono, an accomplished Filipino vocalist and actress, and Filipino and Tahitian dance demonstration by Lezith Benton from the Philippine-American Association of Alabama.

Tolentino-Ladrillono wowed the crowd with her soprano range while singing a traditional Filipino song performed in *Tagalog* and selections from *Phantom of the Opera*.

Lee addressed issues of leadership, caring and acceptance based on her career experiences and her Korean cultural upbringing.

"Care about your work and other people, including diversity," she said. "Inclusion requires genuine sincere interest—if you do not have that, you cannot have true diversity."

Lee challenged everyone to join her be in becoming a leader by listening to differences and understanding perspectives, explaining that it made work and accomplishments a true joy. Lee concluded by quoting Indian philosopher and cultural leader, Mahatma Gandhi.

"Be the change you want to see in the world – if you want to see excellence, leadership and inclusion, do not wait for someone else, it's each of us who can bring change," Lee said.

Photo by James Campbell

Photo by Bruce Hudgins

Above, Lezith Benton from the Philippine-American Association of Alabama, performs a dance on stage during Huntsville Center's Asian American/Pacific Islander Heritage Month. The observance was sponsored by the Center's Equal Employment Office. Left, the talented Luz Tolentino-Ladrillono sings a traditional Filipino song. Above center, guest speaker Seunghee Lee from the Marshal Space Flight Center, talks about the influence her community had on her life and her career with NASA.

Ethics Corner

Back to the Future

A discussion concerning time (and attendance)

By Ryan Black
Office of Counsel

As the Huntsville Center picnic approaches in June, I thought it might be the opportune time to look back on some of the Center's Time and Attendance Regulations in order to prepare for the future.

We have regulations about time and attendance? Yes, we do. They are contained in CEHNCR 690-1-45.

For starters, all employees must arrive to work by and remain at work during the core hours (identified in CEHNCR 690-1-45). Otherwise, the employee must take leave (as approved by the supervisor, of course).

Also, there are specific rules about working overtime. Any overtime must be approved in advance by the supervisor. This can be a verbal approval which must be later documented in writing. If you decide you want to come in and work on a weekend and then show overtime on your time sheet, you must have prior approval. If not approved, you are not entitled to payment. You need to be sure you understand the rules on overtime.

Furthermore, employees are required to take an unpaid lunch break of at least 30 minutes. Working through lunch and leaving early is not permitted. It should also be noted that there are no approved breaks for eating breakfast, smoking, or any other purpose.

Approved structured breaks are generally for employees who work on assembly lines or cannot get up and use the rest room when the need arises. Employees at the Center are certainly encouraged to get up and use the rest room when the need arises, or take care of any other needs when necessary. It is up to the supervisors to monitor employees and ensure that they are working the eight hours for which they are being paid, which brings us to the Center's Engineer Day and Awards Ceremony picnic.

Each employee is invited to attend the Engineer Day Awards Ceremony this year at Redstone Arsenal. The event is an official government function, and employees that are attending are on government time. Hence, any employee that leaves the picnic early or decides not to attend the picnic must take leave (as approved by the supervisor, of course) unless they remain at work. Since employees will be paid for the eight hours they are supposed to be on duty, it is expected that they will participate in the government activities for eight hours that day.

For more information, feel free to e-mail me at *ryan.black@usace.army.mil* or call me at 256-895-1105.

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