

Falls City Engineer

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U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT



US Army Corps
of Engineers
Louisville District®

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challenge to fix
Markland gate
leaves**

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Commander's Comments



Army photo digitally enhanced

Col. Keith A. Landry, Ph.D., P.E.
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

Team,

This year has proved to be very exciting and challenging for the Louisville District. With the year winding down, I thank each of you for your hard work and dedication to our organization. I am so proud to be commanding such a great district. I encourage you to enjoy the holidays with your families and reflect on your accomplishments. I ask that we remember those members from our district who are deployed and away from their families in support of contingency operations overseas.

This quarter, David Dale and I, along with your senior leaders, are rolling out the Louisville District O-Plan designed to synchronize the district's program execution with the Great Lakes and Ohio River Division and headquarters' plans to get the Corps to "great." The O-Plan supports headquarter's Campaign plan and Division's I-plan. The district operations plan includes district goals, division and office objectives and branch and section actions. All of these are linked to individual performance objectives you will help define.

The strength of the LRL O-Plan lies with each of you. I need you to help me (1) Refine our Execution, (2) Strengthen our People and Processes and (3) Improve Customer Satisfaction. We cannot go from good to great without everyone's support. I appreciate your work and your continued support as we move forward and make 2010 better than 2009. I thank you for your partnering and continued communication with the public and Congressional and local and state representatives. This is a larger undertaking since we coordinate with publics within our civil and military boundaries and across the nation and Puerto Rico with our reserve military construction projects. Being open and transparent about our work is an important foundation for trust and communication. I hope you all stay safe and healthy during the holidays, and I look forward to seeing you all back to work in January.

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District Commander
 Col. Keith A. Landry

Public Affairs Chief
 Todd Hornback

Send articles to Louisville District
 Public Affairs Office at:
katelyn.c.newton@usace.army.mil

USACE, Louisville District
 PO Box 59
 Louisville, KY 40201-0059

*On the cover: Fall is a beautiful time
 to visit Caesar Creek Lake in Ohio.*

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Public hearing in Pikeville prompts public response to Nationwide Permit 21



Coal miners and their families wait anxiously to enter the public hearing concerning Nationwide Permit 21 in Pikeville, Ky., Oct. 13. More than 3,400 people attended the hearing to share their concerns with government officials.

Jack Sweeney

By Jenn Domashevich, public affairs

The U.S. Army Corps of Engineers held a formal public hearing Oct. 13 at the East Kentucky Expo Center in Pikeville, Ky., to hear comments on Nationwide Permit (NWP) 21 in the nation's Appalachian region.

Approximately 3,400 people were in attendance to voice their opinions regarding proposed changes to the surface mine permitting process.

Under Section 404 of the Clean Water Act, a permit such as NWP 21 is required to authorize the discharge of fill material into streams or other waters of the United States for surface coal mining activities.

There are currently two proposal actions being reviewed for NWP 21. One proposal is to modify NWP 21 to prohibit its use in the Appalachian areas in Kentucky, Ohio, Pennsylvania, Tennessee, Virginia and West Virginia until it expires on March 18, 2012; and the other is to suspend NWP 21 to provide an interim means of requiring individual permit reviews in Appalachia, while proposing to undertake the

longer-term measure of modifying NWP 21.

"I want you to leave here today hearing two main points," said U.S. Army Corps of Engineers Louisville District Commander Col. Keith Landry. "The Chief of Engineers [Lt. Gen. Van Antwerp] has not made a decision yet on the suspension or the modification of the Nationwide Permit 21. He sent me out here to collect feedback that he can use to make his decision. This is democracy in action. This

"This is democracy in action. This is a chance for everybody that wants to be heard to be heard."

-Louisville District Commander Col. Keith Landry

is a chance for everybody that wants to be heard to be heard."

The Corps of Engineers received numerous requests to hold public hearings, and allowed concerned parties to assist in the decision-making for the two proposed actions. As a result, six public hearings

were held in cities in or near the coalfield regions in each of these six states, Pikeville being one of these cities.

"This is just as important, even if the chief of engineers does decide to suspend or modify the use of Nationwide Permit 21 for certain coal mining activities, there are still other permits available that can request to be considered for the same activities," Landry said. "So just because he says 'I don't want to use this one anymore,' it doesn't mean that

there are no other options."

The Corps is continuing to collect information and will not make decisions on the proposed suspension or modification actions until after the public hearings, and after the close of the comment period.

Several elected officials

were also in attendance at the hearing and spoke in support of the mining industry.

"It's an embarrassment that we have to be here tonight to defend our hardworking men and women," said Kentucky Sen. Ray Jones (D), who is the grandson of two union coal miners.

Kentucky Lt. Gov. Dan Mongiardo, a surgeon, compared coal mining to what he experiences in his operating room.

"People look at pictures of a strip mine, and they see a terrible mess," said Mongiardo. "Well, if you come into my operating room, you will also see a terrible mess. But, if you will wait for a little while, what you will see is a small scar. When done right, that is what surface mining leaves, a small scar.

"Now let's not call it mountaintop removal. Let's call it what it really is, mountaintop development," said Mongiardo, whose grandfather worked in a Harlan County coal mine after immigrating to the United States. "I work in a
(Continues on Page 4)

hospital built on a mountaintop development; I have flown into airports on mountaintop developments.”

The environmental group, Kentuckians for the Commonwealth (KFTC), also attended the hearing to voice their support for environmentally-sound mining practices.

“KFTC strongly supports the proposal to strengthen the permit process for coal mining valley fills so our water resources will receive the protection they need,” said Doug Doerrfeld with the KFTC. “These proposals are the right thing to do.”

Fellow KFTC member Mary Love agreed with Doerrfeld.

“We do not want to stop coal mining, we just want it done responsibly,” said Love.

Everyone who wanted to speak was given the opportunity; 132 people signed up to make a verbal statement.

Many coal miners voiced their concerns of losing their jobs and stressed the nation’s dependence on coal. The environmentalists present voiced their support of NWP 21 and their concerns of protecting the nation’s waterways.

“I take very seriously the responsibility for balancing protection of the environment and ... understanding the role that coal plays in the energy and national security portion of the country,” said Landry during his closing remarks. “So, there’s a constant tension there, and believe me, I’m aware of it, and it is one we struggle with every day. It’s hard to do what’s right by everybody involved, and the best I can do is try to maintain the integrity of the process that I am charged with executing.”

Comments were accepted until Oct. 26, and no final decision has been made.



Jack Sweeney

Col. Keith Landry talks with many concerned citizens before the meeting in Pikeville, Ky., on Oct. 13. Approximately 3,400 people were in attendance to voice their opinions regarding Nationwide Permit 21.

ARRA funds district projects

American Recovery and Reinvestment Act

By Carol Labashosky, public affairs

Duck Creek benefits from ARRA

On Nov. 4, an American Recovery and Reinvestment Act (ARRA) contract was awarded for the Duck Creek Local Flood Protection Project in Cincinnati, Ohio.

The contract was awarded to Mainline Road and Bridge Construction, Inc., Dayton, Ohio. It includes work on the final segment, “4C,” of the floodwall and levee project.

It was awarded with a combination of ARRA and Omnibus funds. The ARRA portion is \$3.64 million and the FY09 Omnibus portion was \$771,000.

The work will involve construction of floodwalls, a

precast concrete arch culvert, and other features between Interstate 71 and the northern limits of the IlSCO Corporation property along Duck Creek road.

The work will begin in December 2009, and it will complete the Duck Creek project. The work should be finished by late spring of 2011.

ARRA funds Green River Lake restrooms



Contributed by Seth Finn

Project Engineer Joe Pike and Construction Representative Seth Finn visit the ARRA funded visitors center restroom at Green River Lake. This civil project is currently at the halfway point in construction.

Louisville Repair Station up to the challenge to fix Markland gate leaves



The 250-ton miter gate leaf is raised horizontally from the bottom of the lock chamber by the Henry M. Shreve crane on Nov. 10.

By Carol Labashosky, public affairs

In just more than one month's time, the U.S. Army Corps of Engineers Louisville Repair Station (LRS) has hoisted 500 tons of miter gate, welded steel and replaced and refurbished lock gate components after the Markland Lock gate failure Sept. 27.

Repairs are in full swing to open the Markland 1,200-foot lock chamber in April 2010. Both gate leaves have sustained some structural damages, but are repairable.

"A lot of progress has been made, and commerce continues to move on the river," said Gene Dowell, district locks and dam operations manager. "The team has been working really hard."

On Nov. 17, the Louisville repair fleet departed for its home base on Shippingport Island in Louisville, Ky., with the damaged downstream Markland lock miter gate leaves. There, repairs on the gate leaves and their components will continue. Repairs on the middle wall gate leaf started on site after the gate failed Sept. 27.

"The repairs we are doing now are intricate and time consuming work," said Tracey Keel, assistant operations manager for locks and dams.

The gates are slightly bent or warped and a significant amount of welding work needs to be done.

"A critical aspect of the work is to ensure the (repaired) leaves and the pintle ball area at the bottom and gudgeon pin at

the top line up perfectly straight and true," said Keel. The repair crew will use lasers for precise alignment.

Before the mishap, new lock gates for Markland had been ordered, and now that delivery has been expedited by nine months so they will arrive by mid-March.

The Henry M. Shreve floating heavy-lift crane played a major role in setting in motion the second phase of repair work—the work that is done on Shippingport Island. The Shreve has a 550-ton lifting capacity and works up and down the Ohio River and beyond to lift gates out of lock chambers and onto other vessels for maintenance and repairs.

"Without the Shreve, we would have had to cut these gate leaves apart to get them out," said Greg Werncke, structural engineer. "This vessel has paid for itself many times over already."

The Shreve, custom-built in 2002, typically lifts gates vertically out of lock chambers, but the crew performed an unusual horizontal lift on the river wall gate leaf Nov. 10. Before the lift, eight lifting eyelets were welded onto the gate where it lay at the bottom of the lock chamber. The Shreve then hoisted the gate leaf up and out of the chamber pivoting 90 degrees to set the gate leaf onto a customized DeLong barge. (See the lift at You tube: <http://www.youtube.com/watch?v=snVEimfekNA>.)

"The DeLong barge has room to hold both damaged gates," said Dowell.

The DeLong barge is from St. Louis District.

Paling in size up against the monolithic Shreve, even the little work boat Motor Vessel Russelburg had a big job to do Nov. 10. The Russelburg helped to nudge the DeLong barge into perfect position to accept the 250-ton river wall gate leaf.

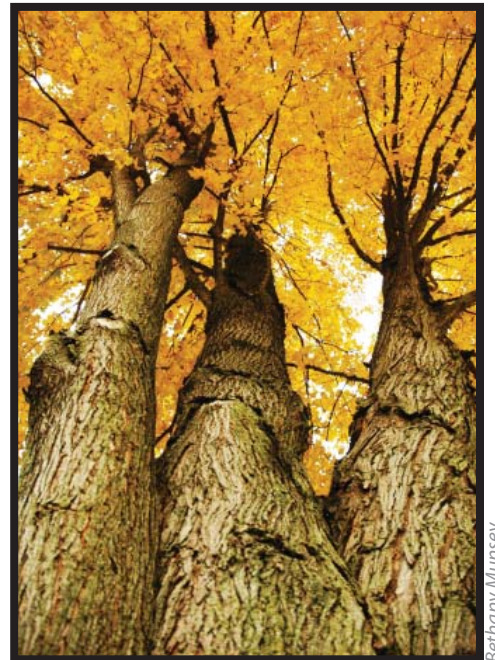
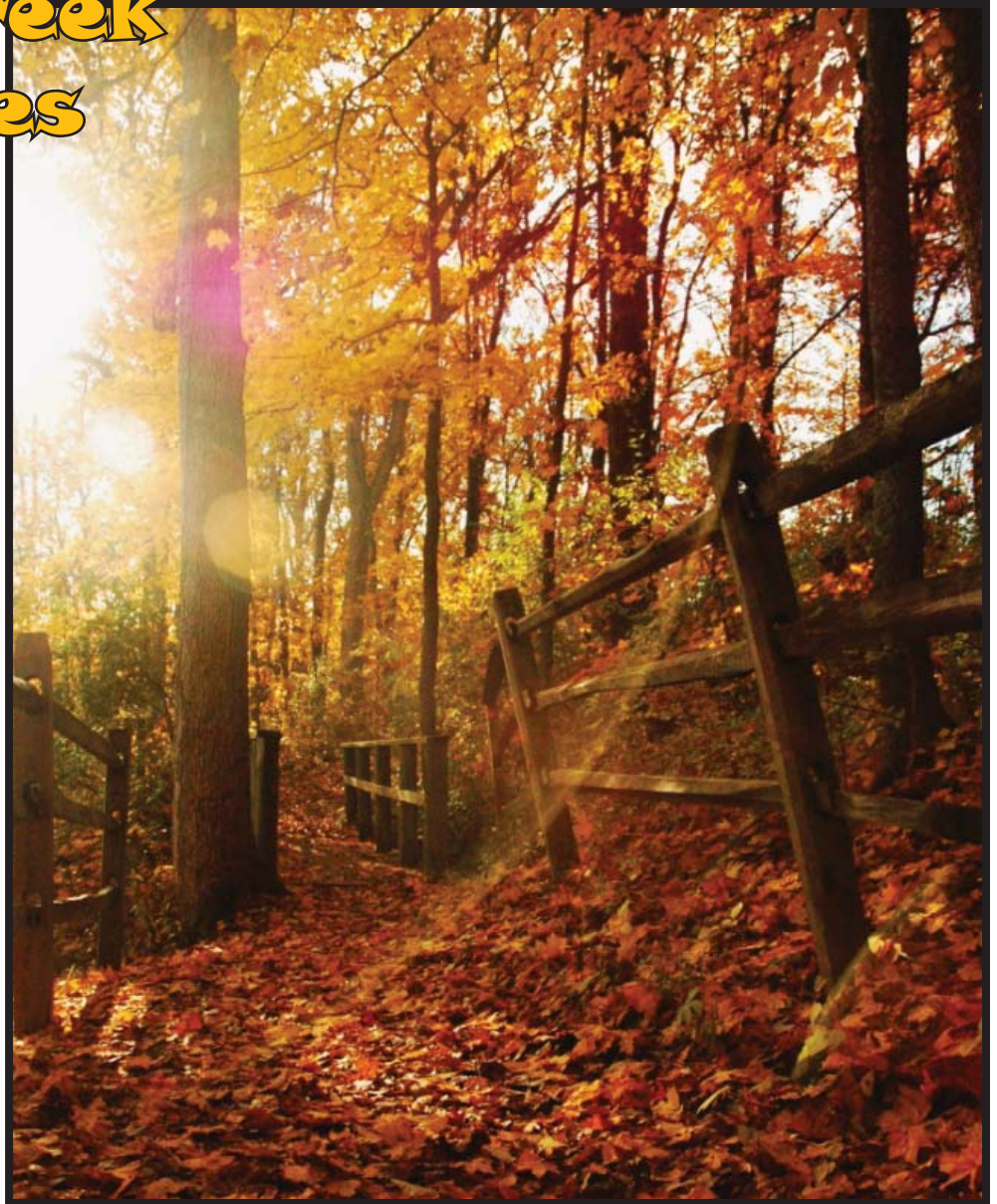
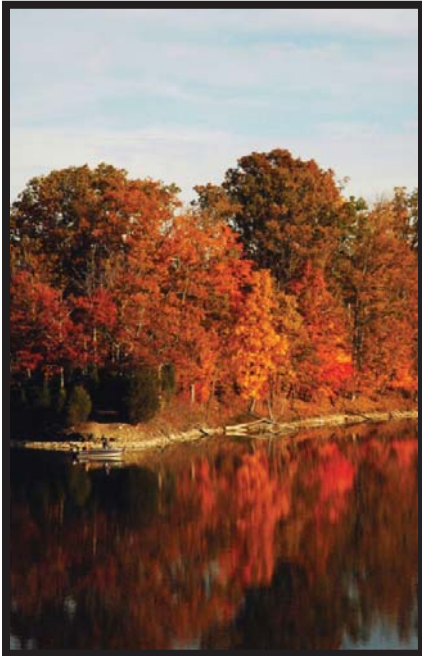
On Oct. 19 the Shreve conducted the first vertical lift of the middle wall gate leaf. It was assessed for damages and structural integrity by Corps structural engineers and found to be repairable.



The Louisville Repair Station crew works to clean the miter gate leaf at Markland.

Caesar Creek Lake shines in Fall

Cover photographer, Caesar Creek Lake Park Ranger Bethany Munsey, enjoys the picturesque views the lake has to offer in the fall. This year, Munsey submitted many of her photos for the photo of the week contest and they were so beautiful we felt they should be shared with everyone. Please enjoy the beauty of Ohio in the fall.



Bethany Munsey

Small business office breaks record

By John Neville, public affairs

Small business is big business, and this year it's been very big for the Louisville District.

The district awarded \$494 million to small businesses for fiscal year 2009, breaking the district's in-house record. The district set out to award 32 percent of all contracts to small businesses, but it awarded 34 percent.

The new record wouldn't have been possible if not for the Department of Defense's (DoD) reinstatement of small business set-asides during the running of the Small Business Competitiveness Demonstration Program (SBCDP).

Instead of setting aside certain business areas—cleaning services for example—for small businesses, the SBCDP opened all areas to small business. But, the SBCDP opened up all areas to large businesses, as well. The smaller businesses weren't able to gain ground in their non-niche areas, but larger businesses were able to expand into those businesses normally set aside for small businesses.

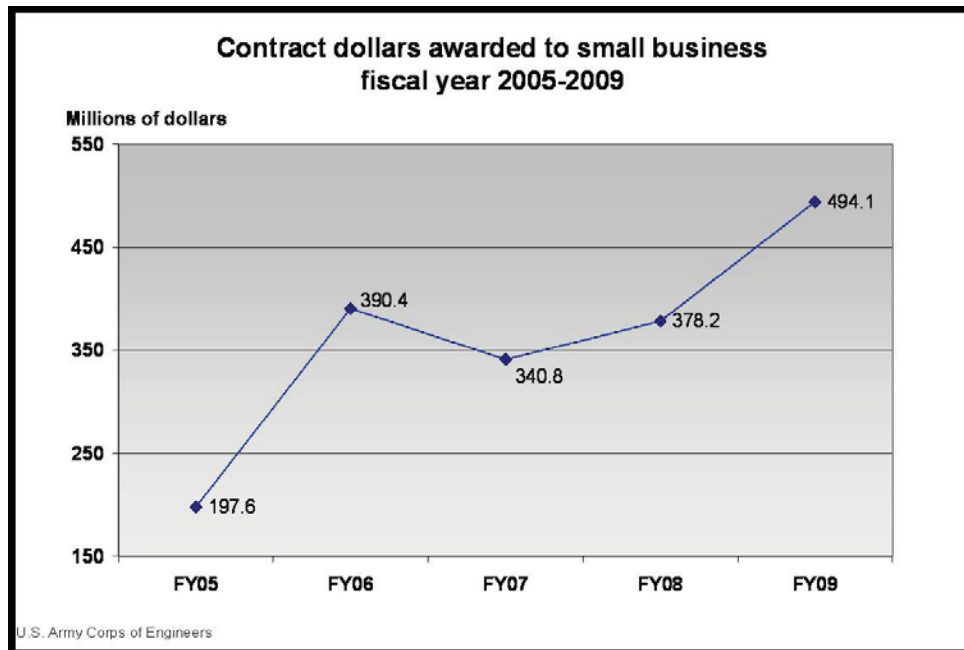
Reinstitution of small business set-asides is limited to federal agencies that failed to meet small business goals.

As a result, DoD fell short of its small business contract award goals last year, and that's why it decided to reinstate the small business set-asides, according to Louisville District Small Business Deputy Linda Hunt-Smith.

"For several years, DoD was working within the guidelines of a demo plan that didn't give any advantage to small businesses competing for Corps jobs," said Hunt-Smith. "While not distinguishing between the two may seem fair, that approach doesn't take reality into consideration."

Hunt-Smith said that DoD uses the SBCDP during years when the agency is meeting its small business contract award goals. However, DoD will reinstate the set-asides program if small business goals aren't being met.

Under the normal program, agencies are required to "set aside" contracts for small businesses if at least two responsible small businesses meet certain market criteria.



Sarah Mattingly

"If a market survey comes back and tells us that we have qualified small business contractors in any subcategory of small businesses, then we'll set that project aside for small business," said Hunt-Smith. "The market surveys are key to determining if a project is going to be set aside for small businesses."

Every year, Hunt-Smith advocates for all small businesses by assuring that they are afforded an equal opportunity to receive their fair share of contract dollars. Small businesses can be either prime contractors or subcontractors. A business is classified as small based on either its size standard—number of employees—or annual gross receipts, depending on the types of services or supplies it provides. The size standards are determined by the Small Business Administration.

Larger businesses do have a competitive advantage, according to Hunt-Smith. For example, when a larger business solicits bids from a subcontractor, the subcontractor will give the larger business smaller quotes than what they will give smaller businesses. The subcontractor believes that since it's working with a larger business, the subcontractor will have fewer issues.

"It shouldn't matter if the prime contractor is large or small, but we know it

happens," Hunt-Smith said.

America's small business sector has solidified its role as the nation's "job factory," said Louisville area Small Business Association spokesman Steve Ayers. They have generated 70 percent of new jobs in the last decade, represent 99 percent of all employer firms, employ more than half of all private sector employees, pay 44 percent of the nation's private payroll, hire 40 percent of high-tech workers, and produce 13 times more patents per employee than large patenting firms.

While Ayers does work to level the playing field for small businesses, there is a bit of irony in his mission.

"We want to maintain a platform where small firms can grow up to be large firms," he explained. "On the other side of the coin, large firms in local communities do create several tiers of opportunity for the small business sector as suppliers of products and services. However, it is the best of both worlds when a small firm grows up to be a large firm in a local community."

Mark your calendars...

Jan. 26, 2010-Louisville District Open House

Jan. 27, 2010-SAME small business workshop

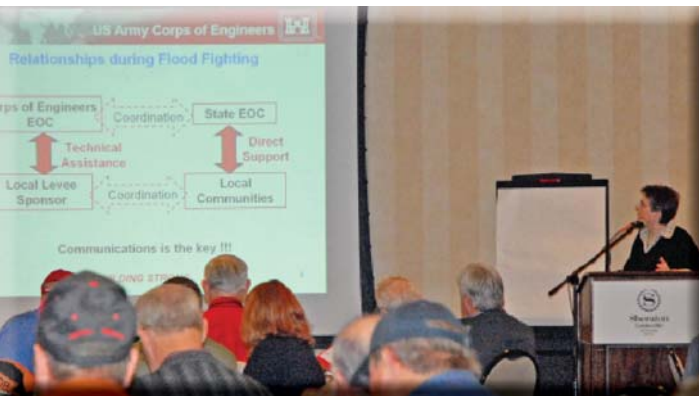
To register for the SAME Small Business Workshop: posts.same.org/kentuckiana/index.htm

Louisville District hosts second annual levee safety conference

By Carol Labashosky, public affairs

The Louisville District hosted its second Levee Safety Conference Dec. 9 in Jeffersonville, Ind. Sixty-three representatives from 27 of the 51 district levee sponsors attended the meeting. Corps presentations included the levee screening tool by Steve Durrett, levee safety officer; periodic inspections under ARRA, Dan Frank, levee safety program manager; videotaping drainage pipes for condition assessment by Terry Sullivan and Neil

Cash, structural engineers; Authorities under Public Law 84-99, Marcella Denton, emergency operations manager; and vegetation removal by Chris Neutz, levee safety geotechnical engineer. Jason Peterson, Florence & Hutchinson, Paducah, Ky., was the guest speaker who addressed slip lining drainage pipes on the Paducah, Ky., project.



Marcella Denton discusses how the Corps is linked at the state level during rainfall emergency events and that communities go through the state to request Corps assistance during flood fighting.

Corps employees give "Gifts from the Heart"



(Left to right) Chris Brackett, contracting division; Lisa Carter, contracting division; Elaine McKim, contracting division; Stephanie Shacklett, construction division; Carol Thompson, project management; Doreen Rogers, construction division; Pam Loeffler, operations division; Mary Smith, project management; and Layna Thrush, Operations Division show items the district employees donated for charity.

This year Louisville District employees in Operations Division, Construction Division, Contracting Division, and Military Project Management supported The Society of St. Vincent de Paul's "Gifts from the Heart" program. Each of these offices received a tree with hearts that listed items children need this season. The toys and clothes are then given

to the St. Vincent de Paul's Open Hand Kitchen where parents can come to select gifts for their children.

In total, the employees filled 90 hearts for the program and helped to make Christmas a little brighter for local children.

Water safety mascots teach lessons on basketball court

Contributed by Wendy Warren, Rough River Lake

On Nov. 10, Bobber the Water Safety Dog (Rough River Lake Park Ranger Adam Taylor) and Buddy the Beaver (Rough River Lake Park Ranger Wendy Warren) participated in the 1st Annual Western Kentucky University Mascot Basketball Game. The game was held at the E.A. Diddle Arena in Bowling Green, Ky. Nearly 5,000 people attended the game, which was Western's exhibition game against Louisiana's Xavier. Also participating in the mascot game was the Chick-Fil-A cow; Wendy's

girl, Wendy; Southern Belle's cow; Buffalo Wild Wings' buffalo; and Western Kentucky University's Big Red. Bobber the Water Safety Dog was on the winning team and received a trophy for his good work.



"It was a fun night and a great way of spreading the water safety message to a non-traditional audience."

-Park Ranger Wendy Warren

High-tech tools link combat forces to USACE experts

By Samantha Tucker, FEST-M public affairs

From real world combat operations to military contingency exercises, the high-tech communications capabilities of the U.S. Army Corps of Engineers Field Force Engineering (FFE) program are in increasing demand.

For ten days in August, about 75 FFE team members brought their unique technology and skills to South Korea to participate in the annual Ulchi Freedom Guardian (UFG), a joint military exercise between the Republic of Korea and the United States. The scope of the computer-simulated drill is immense, spanning the entire South Korean peninsula, and is designed to test the abilities of both military forces to respond to a variety of combat contingencies.

In recent years FFE teams have been integrated into the scenarios to bridge engineering capability gaps in fighting forces.

“Our FFE teams have the capability to leverage technology the regular Army doesn’t have,” said Mitch Glenn, Pacific Ocean Division plans team leader.

“For example, a unit needs to cross a damaged bridge. By using a video camera hooked up to a Tele-Engineering Communications Deployable kit (TEC-D), the FFE can link the unit with the right USACE engineer ‘live’ on a secure network. They can show all the damage and together come up with the quickest and safest course of action, whether that’s repairing the bridge or using our satellite and geospatial engineering capabilities to assess alternate routes of travel.”

The TEC-D kit is a small portable unit that can be brought into the heart of operations. Through this secure and non-secure data and video reachback communication capacity, teams are able to leverage vast capabilities and technologies not found in our Soldier ranks -- even from the most remote locations.

“In combat ops, it provides our troops with direct access to the right experts with the right technology required to work through problems in real time,” said Glenn. “It’s like having thousands and



Samantha Tucker

(Left to right) Mitchel Glenn, Pacific Ocean Division planning cell coordinator; Robert Isenberg, military planner South Pacific Division and Paul Zorko, 533rd Eng. Det., Forward Engineering Support Team – Main out of Fort Knox, Ky., test the connectivity of the TeleEngineering Communications Equipment - Deployable system.

thousands of experts, both in the Corps of Engineers and contract, right at your fingertips when you need them—but without putting them in harm’s way.”

Glenn says through participation in exercises such as UFG and real world combat operations, warfighters now see how the FFE team’s expertise and reach back capabilities improve combat effectiveness.

“More and more military units are writing FFEs into their combat operation plans,” said Glenn. “When we first introduced the FFE capabilities to ROK [Republic of Korea], they saw how it allowed their engineers during a combat situation to communicate without having to send runners. When radios go down, we provide the secure satellite linkup, ensuring that operations continue. They’ve experienced the advantage we bring—they want our expertise and they need our communication capabilities. No other organization can give that to our fighting forces and allies.”

As an expeditionary force—meaning fully deployable on short notice—FFE teams can be on site or in-theater within

hours or days of mobilization, depending on the location and nature of the mission. These teams are structured to meet a variety of combat and disaster relief needs and provide an unprecedented opportunity for personal and professional growth for a variety of specialists from engineers and lawyers to contract managers and intelligence officers.

“Working as part of an FFE team exposes members to a wide variety of agencies,” said Glenn. “If you work in a project office, it’s a good bet you would never interact directly with organizations or agencies such as our combat forces, international liaisons and businesses, or the Department of Homeland Security. With an FFE team, this is just part of our daily operations. The exposure and experience is incredible.”

The FFE program is growing to meet the need with teams in development across the nation.

“Because we do things no one else can do, we are in demand,” said Glenn. “It’s not always easy what we do, and the conditions can be pretty remote and rough, but the experiences are priceless.”

Wetland developments at Carr Creek Lake benefit wildlife, educate youth

By Kevin Wright, Carr Creek Lake



Kevin Wright

Ranger Thomas Jackson shows visitors a spotted newt, one of the many species that benefits from the development of vernal ponds.

The five vernal ponds that were constructed at Flaxpatch Branch off Route 1231 at Carr Creek Lake in July 2007, have evolved nicely. The ponds were constructed by Ranger Kevin Wright with the assistance of Tom Biebighauser, U.S. Department of Agriculture (USDA) wildlife biologist, funding for the project was provided by the Knott County USDA Soil and Water Conservation District.

Since then, the ponds are holding water and re-colonization has started as indicated by the data gathered by Co-op Ranger Thomas Jackson during his research project as a student at Alice Lloyd College. The following is a verified list of species that have colonized at the ponds: red spotted newt, wood frog, bull frog, spring peeper, American toad, Fowler's toad, pickerel frog, southern leopard frog and mountain chorus frog. The ecology department at Alice Lloyd College has expressed an interest in using the vernal ponds for various research projects and studies and in April 2009, an ecology class conducted a short bat survey of the area. Unfortunately, the weather was bad and no bats were netted, but future bat surveys are scheduled. This is a partnership that the U.S. Army Corps of Engineers, Carr Creek Lake and Alice Lloyd College hope to continue for many years.

This fall, Jackson conducted short

introductory tours of the area to some young, but very enthusiastic Head Start students from Knott County. Ranger Jackson explained the importance of the ponds for the local ecology and netted several species of amphibians and insects that have inhabited the ponds for the children to touch, examine and hold. He also showed them some aquatic plants that live in the ponds and how they and the amphibians depend on each other for their existence.

The philosophy at Carr Creek Lake is to get them started at an early age, get children interested in nature and how important it is to preserve and protect it. This is just one program here at Carr Creek Lake that directly supports the need for the nation's youth to "get back to nature."

What are vernal ponds?

Vernal ponds are a type of seasonal or temporary wetland. They were once common, naturally occurring features on the landscape. Vernal ponds are known by many names and vary in definition. In some locations their name denotes the relationship to the vernal or spring equinox. In areas where the seasons are less pronounced, many refer to them as ephemeral, seasonal or temporary wetlands.

Wetlands that do not contain fish are uncommon, but they are so very important to frogs and salamander species because fish are a major predator. Approximately one-half of all frogs and one-third of all salamander species rely on seasonal or temporary wetlands for development. The wood frog, spotted salamander and eastern spadefoot toad larvae are just a few of the amphibians that can successfully mature and emerge from these fishless habitats.

Waterfowl such as the wood duck and mallard use vernal ponds extensively during migration and for consuming insects, crustaceans and seeds for energy during their long flights.

Reptiles such as the eastern box turtle and eastern garter snake use vernal ponds as feeding stations as they move from one area to another.

Mammals use vernal ponds, too. Bats are attracted to them as a water source and to the insects that fly over the water.

Vernal ponds and other seasonal wetlands provide a window of necessity for these species to function and fulfill their role in the ecosystem.

District Commander testifies before Kentucky Waterways Subcommittee

By John Neville, public affairs and Sarah Davasher, strategic communications

The inland waterways—as a mode of commerce—are efficient, good for the environment, and reduce costs for businesses and consumers. However, this navigation system can't be taken for granted. The U.S. Army Corps of Engineers Louisville District has assigned failing grades to significant features of the current system that makes river commerce possible along the Ohio River.

On Oct. 20, Louisville District Commander Col. Keith Landry testified before the Kentucky Waterways Subcommittee, an interim subcommittee of the Kentucky General Assembly's Transportation Committee that was organized to support barge transportation on Kentucky waterways.

The presentation relayed the tremendous economic impact of barge transportation and asserted the importance of prioritizing repairs and replacement of the aging navigation infrastructure within the Ohio River system. Committee members expressed appreciation of LRL's efforts to inform the committee, which is concerned that the public does not have an understanding of the significance of the navigation infrastructure.

Louisville District and the civil works mission

The Louisville District's civil works mission is immense, encompassing nearly 76,000 square miles of the lower Ohio River Basin. This includes the Ohio River (from river mile 438 at Foster, Ky., to river mile 981 at Cairo, Ill.) and its tributaries.

Primary Corps of Engineers civil works services include flood damage reduction, navigation, regulatory activities, water supply, water quality, hydropower, environmental conservation and enhancement, recreation, and emergency response. Landry's testimony focused on the navigation portion of the Corps' mission and the locks and dams sustaining inland waterways commerce.

Locks and dams

Louisville District employees operate eight navigation dams and 16 lock chambers located along the Ohio River, 24 hours a day, 365 days a year. Three of



John Neville

A 15-barge tow loaded with coal passes through the new 1,200-foot lock chamber at McAlpine Locks and Dam in Louisville, Ky. Tows began locking through April 2009.

Kentucky's locks are among the top five busiest in the nation, and five of the state's locks are among the top ten. The Commonwealth touches 664 miles of the Ohio River.

There are 20 navigation lock and dam systems along the Ohio River. Those not within the Louisville District's jurisdiction extend into either the Huntington (W.Va.) District or the Pittsburgh District.

The Ohio River navigation system is a national asset, employing more than 100,000 workers and generating \$11.5 billion in business activity and another \$3 billion in tax revenue. The system provides a low-cost mode of transportation for the bulk commodities of industry, agriculture and commerce. About 148 million tons of coal and another 122 million tons of petroleum products, chemicals, grains and stone pass over the Ohio annually.

The Ohio River presents an efficient way to do business, while reducing the number of trucks on the nation's highways. On a single gallon of fuel, one ton of freight can travel at least 589 miles on the river, 65 miles on the highway, or 425 miles via rail car, according to a Texas Transportation Institute study. These savings reduce operating costs of businesses and are eventually passed down to the consumer in the form of cheaper prices.

"A dependable and efficient inland

waterways navigation system is a critical component of a healthy economy," said Landry. "A healthy economy—within the commonwealth, the region and the nation—is critical to national security."

A dependable and efficient inland waterways system is also good for the environment. Fourteen million metric tons of carbon dioxide emissions would've made their way into the environment had trucks been used instead of barges.

An aging infrastructure

The benefits realized by a dependable and efficient inland waterways system can't be taken for granted. Many of the lock and dam systems along the Ohio River need repairs, but the agency's efforts to repair and replace aging infrastructure are limited. Limited funding causes industry, the Corps, and Congress to evaluate locks and dams to determine where to direct the millions—and sometimes billions—of dollars to system repairs and replacement.

The recent miter gate failure at Markland Locks and Dam is an example of what can happen when a lock shuts down. On Sept. 27, a miter gate leaf became completely dislodged and fell into the 1,200-foot lock. The other leaf hung dangerously until Corps workers stabilized it with cables.

(Continues on Page 12)

The miter gate at Markland is 50 years old, the structure's projected life cycle. It was scheduled to be replaced December 2010. An auxiliary 600-foot lock was open within 48 hours of the failure. But 15-barge tows locking through the smaller lock can only lock through half their load at one time, turning a one-hour lock into more than a two-hour process. Such delays cost businesses, the towing industry, power plants and consumers millions in lost revenue and higher prices for commodities and energy and other products. A complete shutdown of the river would undoubtedly cause more harm.

"The failure of Markland is a symptom of a much broader disease," Vice President of Investor Relations and Corporate Communications for Jefferson Commercial Lines Inc. David Parker told Business First in an Oct. 23 interview following the gate failure. "What I mean by that is that the system is aging generally, while the demands on the system are growing generally. The challenge to the system has never been more acute."

Rep. Geoff Davis, 4th District, conveyed the importance of the inland waterways system in a press conference two days after the failure.

"The river is a great silent servant," he said.

How to meet infrastructure re-investment goals

Currently, the Corps of Engineers'

headquarters is engaged in trying to address infrastructure reinvestment. In doing so, the Corps recognizes the following goals:

- 1) Create a long term infrastructure investment plan (20 + years)
- 2) Establish national criteria for ranking projects
- 3) Outline a prioritized list of projects to receive capital improvements
- 4) Identify the realistic investment level required to maintain reliable infrastructure system
- 5) Implement project delivery process improvements to ensure projects are completed on time and within budget
- 6) Recommend revenue sources
- 7) Develop implementation guidance for sustainment of the investment plan

To meet these goals, Landry suggested establishing an objective coalition of subject matter experts to advise federal and state officials on a frequent basis.

"By bringing together the expertise and resources of all appropriate federal, state and local agencies, we can solve problems at the proper scale, integrate solutions, and leverage funds," Landry said. "The Louisville District would be happy to provide subject matter expertise to the subcommittee anytime, or establish a plan to communicate with the subcommittee on a quarterly or annual basis. Frequent communication is the basis for a productive partnership."

Quick facts on the Louisville District's economic impact on the Commonwealth

- LRL builds and maintains dozens of projects across Kentucky. There were more than 125 construction projects in fiscal year 2008, totaling \$410 million in expenditures.

- Directly employed about 1,100 full-time district employees in fiscal year 2009 and paid out about \$67 million in employee compensation.

- Over 23 percent of commodity tonnage that moved through the district's locks was bound for Kentucky or originated from the state.

- District expenditures created \$515 million of personal income in Kentucky, leading to \$40 million in sales and income taxes for the Commonwealth.

Air Force support sections recognized for design achievements

By Ken Beyer, Public Affairs

Six Louisville District Air Force Support sections' projects were recognized for excellence at the 2009 Air Force Materiel Command (AFMC) Design and Construction awards luncheon Oct. 21 at Wright-Patterson Air Force Base, Ohio.

Established to recognize and promote design excellence, winners in this competition will represent AFMC in the 2009 U.S. Air Force Design Awards Program competition.

LRL projects that received awards are:

Honor award for Facility Design

-Air Force Institute of Technology Addition, Wright-Patterson Air Force Base

Merit award for Concept Design

-Alter Acquisition Management Facility,

Bldg. 12, Wright-Patterson Air Force Base
Citation awards for Concept Design

-Information Technology Complex, Phase 1, Wright-Patterson Air Force Base
-Marine Reserve Center, Wright-Patterson Air Force Base

-Sensors Directorate Lab, Wright-Patterson Air Force Base

Citation award for Interior Design

-Materials and Manufacturing Directorate lobby, Wright-Patterson Air Force Base

Projects were not the only district winners.

Louisville District Air Force Support Section Chief, Dewey Rissler, was selected as the Civilian Project Manager of the Year.

According to the nomination package,

Rissler delivered critical leadership to Wright-Patterson Air Force Base's huge 2005 BRAC development/bed down effort. He spearheaded the largest construction endeavor at the base since World War II—more than one million square feet of facility construction (a \$332 million effort)—the largest Base Realignment and Closure Act (BRAC) construction in the command as well as in the Air Force. The narrative reads, Rissler is committed to excellence—a true problem solver with the uncanny aptitude to solve complex issues. His calm, respectful demeanor paired with extensive experience and professionalism set the tone for the team.

Safety Spot

Slips, trips and falls: The leading cause of lost-time accidents

By Larry Keith, safety office

Slips, trips and falls often involve a number of factors, such as unsafe work practices, unsafe site conditions, and failure to comply with safety requirements. Slips, trips and falls are a significant problem affecting every aspect of our work environment from the office to field setting.

The Louisville District experienced a total of eight lost-time government accidents in FY 2009. The accidents were fairly evenly distributed among projects. The greatest frequency of lost-time accidents by type were slips/trips/falls which accounted for 63 percent, followed by struck by/against- type accidents which accounted for 25 percent of the total.

Fifty percent of all government recordable lost-time accidents from FY 2006 – 2009 were slips/trips/falls.

- Falls from different levels accounted for 23 percent of all government accidents

- Falls from same level accounted for 27 percent of all government accidents

- First and 2nd quarters accounted for 65 percent of all falls, with the 2nd quarter having the highest frequency of accidents (40 percent). January, February and August were the highest months, each experiencing 15 percent of the total.

- Sixty five percent occurred from 6 a.m. until noon of which 35 percent occurred 8-10 a.m.

- On the average falls accounted for eight lost work days per government injury

The district experienced a total of ten lost-time-contractor accidents in FY 2009. The



greatest frequency of lost-time accidents by type were slips, trips and falls, which accounted for 50 percent, followed by struck by or against types, which accounted for 40 percent of the total.

Fifty percent of all contractor recordable lost-time accidents from FY 2006 – 2009 were slips, trips and falls.

On the average falls accounted for 21 lost work days per contractor injury.

There are many situations that may cause slips, trips and falls such as ice, wet spots, grease, polished floors, loose flooring or carpeting, weather conditions, uneven walking or working surfaces, clutter, electrical cords, getting on and off equipment improperly, unsafe work platforms, and improper use or not using ladders when appropriate.

The preventive measures are “usually obvious,” but “often ignored,” such as keeping walkways, stairs and access

to work areas clear, providing adequate lighting and keeping extension cords, lines, hoses elevated and/or positioned as to not create a tripping hazard. Other measures include safely storing scaffolding and work platforms when not in use, using ladders properly, wearing lug soles in icy weather, being aware of conditions and activities around you at all times and being patient.

One of the simplest things that we can do is practice good housekeeping. Most slips, trips and falls are needless and preventable.

Stay alert and develop an awareness of what could constitute a slip, trip or fall hazard in your work environment. No matter how simple or complex the task, take time to practice risk management by identifying the hazards and take the appropriate actions to make the situation safe for you and your co-workers.

Seven common accident causes

1. Taking Shortcuts
2. Being over-confident
3. Starting a task with incomplete instructions
4. Poor house-keeping
5. Ignoring safety procedures
6. Mental distractions from work
7. Failure to pre-plan the work

Don't let safety take a holiday

Source: Army Safety Gram

U.S. Army awards \$51.5 million contract for the Middletown Reserve Center

By Todd Hornback, public affairs

The U.S. Army Corps of Engineers awarded a \$51.5 million contract to KBE Ventures, a joint venture of KBE Building Corporation, Farmington, Conn., and Derrita Construction Co., Inc., of Middletown, Conn., for construction of the Middletown Armed Forces Reserve Center at Cucia Park in the City of Middletown, Conn.

The contract award emphasizes what can be accomplished when residents, community and congressional leaders and the Army work together.

"I want to thank the Middletown, Conn., and congressional leadership for their partnership to bring this project to fruition," said Louisville District Commander Col. Keith Landry. "Most importantly, a big thanks to the Middletown residents who offered their invaluable support and input into the process. We could not have awarded this contract without all of the community support."

Middletown Mayor Sebastian N. Giuliano agreed with Landry regarding the active input of the city's residents.

"I think the whole process was enhanced by the active and passionate involvement of our citizens, those that were immediately impacted and those that weren't. I think the city's Citizen Army Base Advisory Panel and the work

The contract includes construction of a 164,000 square-foot training facility with administrative, educational, assembly, library, learning center, vault, weapons simulator and physical fitness areas for four Army Reserve units and six Connecticut Army National Guard units.

Connecticut Governor M. Jodi Rell, stated, "Today's announcement regarding construction award of the Middletown Armed Forces Reserve Center signifies we have cleared yet another critical gate in the process of delivering this project for Soldiers in our Connecticut National Guard. Although several gates still remain, I am encouraged by the collaborative manner with which the Corps, the city and the many stakeholders are now working to make this sorely-needed project happen."

The 42-acre park is zoned industrial. The reserve center support facilities include a 35,000 square-foot organizational maintenance shop and a 3,886 square-foot unheated storage building. In addition, the contract includes associated parking areas, walkways and access roads. Approximately 100 full-time personnel are expected to use the campus.

"I am pleased that the Army is moving forward on the Cucia Park site, and balancing the needs of the community with

"I am pleased that the Army is moving forward on the Cucia Park site, and balancing the needs of the community with those of Connecticut men and women who serve in the Army Reserve and National Guard."

-Rep. Rosa DeLauro

of our planning office can be models on how something like this can work and the communications level necessary between a local municipality and the Army.

"I also give credit to the Army for their willingness to listen to our needs, concerns and issues and their willingness to include those thoughts into site selection, and now construction. Middletown will welcome the Army to town," said Giuliano.

those of Connecticut men and women who serve in the Army Reserve and National Guard," Rep. Rosa DeLauro said in the Oct. 15 release. "Today's announcement is the direct result of the Army ultimately listening to the concerns of the city and its residents to ensure that a mutually agreeable site was selected. I believe the center will provide both a much needed new home for Connecticut's guard and reserve



Ron Elliott

Louisville District Commander Col. Keith Landry talks with a veteran during a Veterans Day program held in Middletown, Conn. The relationship between local citizens and the Corps is vital for mutually beneficial progress.

and benefits for our community at large, and I will continue to work with the Army, the city and the Middletown community to ensure proper development of the site."

"This marks a proud occasion not only for the citizens of Middletown, but also for those who serve so proudly in the Connecticut National Guard and the reserves," said Sen. Joe Lieberman. "This state-of-the-art facility will provide our brave service members with greatly improved training and quality of life, making them better prepared to defend our country."

The reserve campus is to be built at a former industrial site currently known as the Cucia Park on Smith St. in Middletown. The U.S. Army Reserve 99th Regional Support Command has applied for a permit under Section 404 of the Clean Water Act from the U.S. Army Corps of Engineers New England District. They are currently reviewing the application in collaboration with federal resource agencies. The Corps will issue, deny, or issue with special conditions, a permit for the Cucia Park site.

Corps castle traces a long history

Courtesy of Nashville District



The castle is a distinctive symbol of the U.S. Army Corps of Engineers.

The origin of the turreted castle as a symbol of the Corps of Engineers is shrouded in mystery. Unfortunately, the official records of the Corps housed at the Military Academy at West Point disappeared in a pre-Civil War fire in 1838 that destroyed the building containing the records.

As a consequence, many speculative stories about the origins of the engineers have been advanced. One story traces the origins to a French connection. During the American Revolution, the Continental Army filled its necessity for trained military engineers by either borrowing them from France or having French engineers volunteer for service in the Continental Army. Stories about castle origins credit these French engineers, in particular, Gen. Louis Lebeque Duportail, chief engineer, Continental Army, (July 22 1777-Oct. 10, 1783), with a design based on a castle-style fortification in Verdun, France. These French engineers disappeared from the scene before the castle design

appeared in the American Army.

While there may be some truth to the French connection, the origins are also attributed to Col. Jonathan Williams and a member of his staff, Alexander Macomb. Williams, grandnephew of Benjamin Franklin, assisted Franklin during his tenure as envoy to France during the American Revolution. After the war he adopted engineering as a profession. In 1801, Williams was a major, Corps artillery engineer, and inspector of fortifications. In 1802 President Thomas Jefferson appointed him commander of the newly-created Corps of Engineers and the U.S. Military Academy at West Point. Thus, he was the first chief engineer of the reestablished Corps and superintendent of West Point. Through his work as chief engineer, there is a clue as to who designed the Corps insignia. During the period 1807-1812, he designed and constructed Castle Williams to defend New York Harbor. The gateway to that

castle-style fortification bore an eagle over the center. Other examples included Castle Pinckney in Charleston, S.C., and Castle Clinton, which also defended New York Harbor. An assistant on his staff was Col. Alexander Macomb, who became the chief engineer, June 1, 1821 through May 24, 1828. In 1828 he was elevated to commanding general of the U.S. Army.

In 1807 Macomb made the earliest known drawing of the engineer button adorned with a castle motif, worn on the uniforms of the West Point cadets during the War of 1812. Another engineer officer, Col. Richard Delafield, superintendent of the military academy, added the turreted castle to the new uniform for the West Point cadets in 1838.

Macomb, as commanding general of the Army, had an active part in the design of the new uniform.

The castle was also a major element in the architectural design of the buildings at West

Point, as typified by the old library built in 1841 that survived until 1961, when it was torn down. Delafield supervised the design and construction of the buildings destroyed by the fire, including the old library.

From the evidence, one would conclude that Williams and Macomb, both familiar with French military tradition and heraldry, designed not only the Corps castle emblem but also the Essayons button. Although Macomb's design appeared in 1807, the authoritative description of the button appeared in February 1840, in General Orders 7, AGO: 'Essayons,' a bastion with embrasures in the distance, surrounded by water, and the rising sun, the figures to be of dead gold upon a bright field.'

While the designs of the emblem and the button have changed, the castle remains a distinctive symbol of the U.S. Army Corps of Engineers.

CFC Update

Combined Federal Campaign

Louisville District employees exceeded their goal by contributing more than \$110,700 to the Combined Federal Campaign.

Thanks to all canvassers and coordinators for making it a success.

Louisville District hosts ranger conference



“We are working those park rangers to the bone, but those rangers are the front line troops--they’re the faces of the Corps.”

-Louisville District Commander
Col. Keith Landry

Charlie Leath of the Nashville District looks out at the bird population that inhabits the Falls of the Ohio during the 2009 Great Lakes and Ohio River Division ranger conference held Oct. 27-29 in Louisville.

John Neville

By John Neville, public affairs

They’re on the front lines of Corps lakes, but from Oct. 27-29 several hundred were in downtown Louisville for the 2009 U.S. Army Corps Great Lakes and Ohio River Division ranger conference.

Day one

Day one opened up with remarks on safety and the presentation of Star of Life awards.

More than 16 million people visited Louisville District lakes and locks in fiscal year 2009. There was a 40 percent reduction in fatalities.

Beginning in May, the Louisville District was able to dedicate several full-time park rangers to water safety education at the agency’s numerous lakes. The opportunity was made possible by using funds from the American Recovery and Reinvestment Act legislation passed earlier this year to stimulate the economy and repair the nation’s infrastructure.

In fiscal year 2008, there were 262 total full and part-time park ranger and natural resource management employees. In 2009, the number grew to 537.

“We had 16 million visits to our lakes last year,” Louisville District Commander Col. Keith Landry said. “We are working those park rangers to the bone, but those

rangers are the front line troops – they’re the faces of the Corps.”

Four Louisville District park rangers were awarded the Star of Life, an award presented to Corps employees or volunteers who take action that prevent a member of the visiting public from being severely injured or becoming a fatality. Actions typically consist of an actual physical rescue; however, pro-active measures that prevent such situations from occurring may also be considered.

Ranger Joe Staigl and maintenance mechanics James Sparks and Justin Sanders of Cecil Harden Lake and Jon Fillingham of Barren River Lake were awarded the Star of Life.

Day two

Rangers are constantly interacting with the public in a variety of situations. They advise lake visitors on the proper way to extinguish a fire, host water safety seminars at state fairs, and occasionally calm the tempers of unruly campers. They’re not armed like law enforcement officers, so rangers depend on their diplomatic abilities to ensure everyone’s visit to the lake is safe.

Since good communication skills are such an important part of the job, the Louisville District invited Dr. Robert Walsh

of Evans and Associates professional and organizational consulting firm to speak to rangers. Walsh spoke about the importance of keeping emotions in check when dealing with the occasional lake visitor who loses his composure. Maintaining patience requires patient listening, Walsh said, and that requires active and effective thought.

“Being patient helps us fight the tendency to only listen to parts of what’s being said, or what is convenient,” he said.

After lunch, the group loaded up on four busses and headed for the Falls of the Ohio National Wildlife Conservation Area. The Falls of the Ohio lie in the Ohio River in the states of Indiana and Kentucky. Permanent settlement at the Falls dates from 1778, when George Rogers Clark established a camp on Corn Island that was located just upstream from Shippingport Island. The city of Louisville can trace its historical development to this small camp.

The Falls is not like Niagara Falls. It’s a series of rapids, which, prior to construction of McAlpine Locks and Dam, dropped 26 feet in three miles. Geologically, the Falls is world-renowned because of the great abundance and variety of well-preserved fossilized corals and associated species found in the Devonian Period limestone formations. More than 245 species of birds have been recorded at (Continues on Page 17)

the Falls, many only stopping off in their seasonal migratory patterns.

In 1981, the Louisville District purchased the 1,400 acres that are the Wildlife Conservation Area that sits in and around the river. The district also runs the interpretive center that sits on the Indiana side of the river. District Natural Resource Manager Keith Richardson supervises the site.

“Our job is to protect fish, wildlife and fossils, and to make it available to the public and for research,” Richardson said. “There are a lot of user groups here, too, and it can get complicated. The Corps maintains navigation and keeps the user groups like fisherman, boaters, kayakers, researchers, etc., happy while looking after the wildlife.”

Day three

Following a briefing on ranger uniforms, park ranger Bill Jackson from the Vicksburg District’s Lake Ouachita Field Office addressed the group. Citing Hurricane Katrina, Jackson spoke about the unique skill of the Corps’ rangers and the demand for their abilities in times of crisis.

Many rangers from the Vicksburg District deployed during the crisis.

“In the after-action report that came out, one of the primary things that was said was, ‘We want rangers,’” he said. “It’s because park rangers work in an atmosphere where we’re under stress at times, we’re able to meet with the public when they’re under stress, and we have such a diverse background that we’re able to adapt to whatever situation we’re placed in. You represent the Corps very well.”

Jackson continued his briefing with examples of what dangers park rangers face today, citing everything from threats to locks and dams, drug manufacturing in remote park regions and gang activity.

“Rangers are on the front lines of defense against those who want to harm dams, parks and lakes,” Jackson said.

While rangers do their best to be the diplomat, they sometimes must use force in defending federal property and the right of the public to enjoy Corps lakes in a secure and safe environment. That’s why the day ended in a self-defense class, an annual requirement for all rangers. Rangers paired off with partners and, following

their instructor’s lead, moved through each self-defense move in their inventory.

“Ever since I’ve been in a ranger uniform, I’ve never had to use the tactics that we teach,” Jackson said. “But we have had rangers who’ve been involved in pushing and shoving, and have gotten out of it.”

When the last punch of the day was thrown, Jackson gave some parting words to his fellow rangers and dismissed the class. Taylorsville Lake park ranger and conference organizer Lisa Freeman said the three-day event was a valuable experience.

“I think it went very well,” she said. “It’s great for networking, and it’s a great way to get our required training done all at once.”



Park Ranger Wendy Warren of Rough River Lake looks at the fossil bed at the Falls of the Ohio.

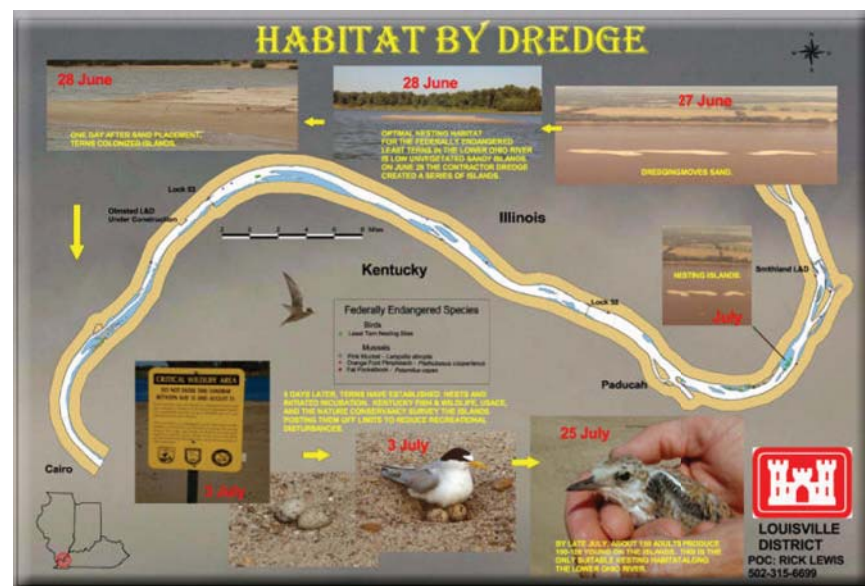
Lewis participates in nationwide environmental poster session

By Sarah Mattingly, public affairs

In October, the Louisville District’s Rick Lewis participated in a poster networking session at the Army Corps of Engineers and the Nature Conservancy Fourth National Partnership Conference in Stevenson, Wa. Lewis, chief of operations division maintenance section, submitted a poster focusing on how dredging by the Corps of Engineers creates vital new habitats for the interior least tern population. The tern is a federally endangered species, and the dredged material islands provide protected nesting sites for about 50-70 pairs of terns.

The conference presented an opportunity to reinforce and expand the partnership among the Corps and the conservancy and many other vital partners. Reflecting the theme of this year’s conference, “Projects to Systems: Restoring and Protecting our Nation’s Natural Capital,” sessions emphasized the integration of individual partnership projects into comprehensive ecosystem-, regional-, and national-scale efforts. The poster session featured envi-

ronmental professionals from around the country sharing project results as well as new research and development achievements. There were 29 submissions.



Rick Lewis’ poster focuses on how dredging by the Corps of Engineers creates a vital new habitat for the interior least tern population.

Corps of Engineers trains forward support teams to help field commanders

By Samantha Tucker, FEST-M public affairs

Moving Army troops to contingency operations overseas requires a huge system of military and civilian support teams, plenty of planning and practice and a well-planned base of operations.

As the largest resource for engineering design and contract management for military operations abroad, the U.S. Army Corps of Engineers trains Field Force Engineering (FFE) units such as Fort Knox's 533rd Engineer Detachment, Forward Engineer Support Team - Main (FEST-M), to quickly launch into an area and begin base camp development for incoming commanders, their Soldiers and all the support elements they need.

Military and civilian engineers and support staff from the 533rd FEST-M joined other FFE units at the Readiness Support Center in Mobile, Ala., Sept. 15-23 to practice that process and bridge the culture gap between military and civilian processes and operations.

"I try to frame the whole discussion so students understand what others are thinking," said Andrew Krause, course instructor and a project manager architect in the Fort Worth District's military project section. "I can't make them experts or even well-versed in all levels of design in a four-day class, but they do get a level of understanding and knowledge of definitions. We get the books and tools in front of them so we speak the same language."

For the course, military and civilian team members train as one. Broken down into smaller groups, they practice base camp development processes, from preliminary planning to cleanup and closure.

"The training is very beneficial in preparation for our mission," said Command Sgt. Maj. Kevin Engel, senior noncommissioned officer in charge of the 533rd FEST-M. "For example, before commanders go into an area, we arm them with enough information to have all the materials, equipment and infrastructure requirements in the area. That way they are prepared for what they're dealing with."

The extensive process requires teams to combine a wide variety of military and civilian specialties, from environmental, legal and real estate to geospatial and elec-

trical, into one cohesive team. The teams are trained on some of the tools used, such as the automated route reconnaissance kit, a device to collect photographs, voice recordings, global positioning system locations and other vital information needed to assess sites.

"What is unique here is that the training we do doesn't fit any one person's skill set," said Engel. "For example, in an infrastructure assessment, there is really one discipline that would deal with that. But here people are exposed to tasks outside what they normally do, so they understand what a FEST-M does and how we provide information to our customers."

Working side by side, the team gains a

"In the civilian world, I know exactly what I'm expected to do," said Matt Harris, architect, 533rd FEST-M. "I gather, coordinate and disseminate information. It's similar here, and after the training I know more of what is expected of me - but there are still challenges, like translating Army vocabulary."

The 533rd is one of only two active Army FEST-M units, both part of the Corps of Engineers, and it is still in the development stage. While team members concentrated on individual tasks, Engel took the exercise as an opportunity to build internal training products and procedures.

"This is kind of a start-level training



Samantha Tucker

(Left) Staff Sgt. Robert W. Lowers II, quality assurance representative, Army Corps of Engineers Far East District, and Maj. Evan Ting, commander of the 565th Engineer Detachment Forward Engineer Support Team - Advance, assess a site in consideration for a base camp using the Ike/Geospatial Assessment Tool for Engineering Reachback.

greater appreciation for their military and civilian counterparts.

"I think the military/civilian mix within the FESTs is great," said Engel. "The civilians bring the technical knowledge and expertise, and the military brings the tactical end. I now have a good understanding of the specialties and what they bring to the table."

For some, it was their first time working in a joint-training environment which added an extra element to the challenge.

event," said Engel. "It's helped us identify some of the missing pieces in our processes, like developing a complete set of standard operating procedures for reporting and tracking information. Now, we have enough of a base knowledge that we can go back to home station and focus more on having those products ready for the next exercise."



LRL environmental division a watchful eye on past defense procedures

Contractors use a cap, similar to the one used at the River Valley middle and high school campuses (later determined to be a FUDS), to seal in any remaining potential contaminants within an isolated location in the soil.

By John Neville, public affairs

Today, the U.S. Army leads the way in environmental stewardship, but some say that hasn't always been the case, often citing toxic chemicals found decades later in the soil at formerly used defense sites (FUDS).

In 1997, the Ohio Environmental Protection Agency (EPA) and Ohio Department of Health conducted an initial environmental site assessment of the River Valley middle and high school campuses (later determined to be a FUDS) due to concerns raised about the number of leukemia cases among school graduates.

It was later determined that the school sat on top of the site of the former Marion Engineer Depot that opened during World War II and operated for 15 years.

Subsequent analyses found two potentially hazardous situations that required further study. The first was a radium-painted, dime-sized aluminum disc below the surface of the soil in front of the high school. The Army used these discs to mark the position of bridges and vehicles so that troops could see them during nighttime operations. The disc was removed and the surrounding soil didn't test positive for radioactivity.

Further analysis of the grounds uncovered a former waste disposal area where the Army disposed of and burned fuels and solvents. The depot was one of the largest in the Army's inventory—a storage point for thousands of vehicles, engineering equipment—and there were a lot of parts.

To prevent parts from rusting while they were stored, manufacturers coated much of the equipment in cosmoline. When time came to use the parts, the Army dipped them in vats of trichloroethylene. Eventually, the leftover chemical residue in the vats was taken to trenches and burned. The trenches, revealed through Corps interviews with Soldiers and civilians who worked at the depot, were located underneath what later became the schools' athletic fields.

Why did the Army dump and then burn hazardous chemicals?

These types of disposal practices weren't as restrictive as they are today because the scientific and medical communities didn't know about the dangers associated with the disposal and use of some chemicals used by the Department of Defense (DoD), according to Louisville District Environmental Division Subject

Matter Expert and Risk Assessor Dr. David Brancato.

Since there were no known health threats, there were no laws regulating the use of these chemicals. Scientific and medical research began uncovering the harmful effects associated with many of the substances used by DoD (and commercial industries), so Congress soon began passing laws that regulated their use.

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA) that regulated any person or facility engaged in the creation, transportation, treatment, and disposal of hazardous waste. However, RCRA didn't address the necessary cleanup at contaminated sites. Then, in 1980, Congress enacted the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), also referred to as Superfund.

"Superfund is intended to establish a mechanism of response for the immediate cleanup of hazardous waste contamination from accidental spills and from the chronic environmental damage such as is associated with abandoned hazardous waste disposal sites," Brancato said.

(Continues on Page 20)

What is the U.S. Army Corps of Engi-

neers' Role in cleaning up FUDS?

The Louisville District's Environmental Division took the lead on the environmental investigation in March 1998. The division's staff specializes in engineering, chemistry, risk assessing, geology and other disciplines. At Marion, the Corps' goal was to figure out if anything on the property presented a risk to the community. If so, then the Corps' job was to contain it or clean it up.

"Based on the interviews, we found where the trenching had occurred," Brancato said. "It was a common activity in the past. Without regulations, if they had no use for material, if it was waste, then it was buried."

Upon further study, the Corps did find contaminants in the subsoil through sampling, but the Ohio EPA and Ohio Department of Health determined that the school could still function, and that there was no definitive association between attendance of individuals who were graduates of River Valley who came down with leukemia and their attendance at the school. The study was based on years of air and groundwater monitoring by the Corps.

However, public opinion was already strongly set against local agencies and the Corps. Contentious town hall meetings, a higher leukemia rate among graduates than the national average, and a very interested media persuaded local officials that the schools should close anyway.

"Science and politics were at odds at that point," Brancato said. "They didn't necessarily believe the reports because the

Ohio Department of Health did proceed with three studies of cancer incidents."

Once the school closed down, the Corps moved ahead with efforts to clean the site so the city could sell the property and use it for other purposes. Thousands of tons of dirt were removed and a cap was placed around the trenching area and sealed. The seal ensures that the remaining soil in the area isn't disturbed due to water infiltration. The Corps continues to inspect the cap annually, and the most recent inspection shows that the cap is working as designed.

What is land being used for today?

The Marion School District sold the site to local businessman Ted Graham, who is in the process of having it rezoned for industrial purposes, in accordance with the deed restriction. The property can't be used for school or residential purposes. Graham was a member of the Restoration Advisory Board, a group of community citizens, Ohio EPA and Board of Health members, and district officials who met monthly during the Corps' investigation. Graham said he's confident in the integrity and safety of the land he purchased.

"The government came in and cleaned it up by the book," he said. "I haven't heard any complaints from the community except for one or two dissidents, and you'll never make them happy. My workers are confident they cleaned up the place and they feel safe working there."

Can't take the depot out of context

The American way of life depended on an Allied victory in World War II, and victory in Europe and the Pacific required an efficient war machine that destroyed either the enemy or its will to fight. The Army's standard operating procedures at that time couldn't account for what's known today about the toxicology of certain chemicals or how they were disposed of. The Soldier who dug the trench or set flame to it had no reason to believe he was creating a situation that could potentially harm Americans more than half a century later.

"Now we have the National Cancer Institute, the International Agency for the Research of Cancer, all subsequent to the laws that were promulgated in the 1970s," said Brancato. "There was activity on installations that would not meet today's standards based on RCRA and CERCLA. That knowledge base is changing the way we do business. Still, there is a tendency to forget the sacrifices these veterans made and the risk that the country was in at the time."

Corps volunteers reach out to middle school students

Sixty minutes is all the time it takes to impact a child's life.

The Middle School Connection program, Sponsored by the Jefferson County Public School Middle School Coalition pairs adult mentors from the Louisville community with seventh graders in the Jefferson County Public School system. The goal is to connect an adult from the community with every seventh-grader in the Jefferson County Public Schools.

The volunteers host two 30-minute conferences with two seventh-grade students. Volunteers discuss topics such as goal-setting, career interests, staying in school, and

the importance of strengthening academic skills for use later in life.

In October, Louisville District staff members sent a positive message to middle school youth by participating in the Middle School Connection program as part of National Middle School Month.

The Louisville District has established a tradition of supporting this initiative, leading to a new record of volunteers. Last year, there were 40 volunteers, but this year 54 employees provided their time to make a difference. On Oct. 9, Col. Keith Landry also participated in the program at Meyzeek Middle School.



Roseberry retires after 32 years of service

By John Neville, public affairs



Louisville District Commander Col. Keith Landry presents Wanda Roseberry with a certificate of appreciation and certificate of retirement at her final project review board briefing. Roseberry served 32 years with the federal government.

Wanda Roseberry walked out of the federal building for the final time—as an employee—Oct. 2 after serving more than 27 years with the Louisville District, capping a 32-year tour with the federal government.

Roseberry began her career with Louisville's Naval Ordnance Station in 1971, staying there until 1975 when she took some time off to raise two daughters, Robin and Lisa.

In 1982, she began working for the Corps' Louisville District, starting with the real estate office before moving to the construction division. She moved to the planning, programs, and project management division 18 years later, beginning as a secretary before moving up to budget analyst. It wasn't long before she was promoted to senior program analyst.

As a program analyst, Roseberry's duties included oversight of the Corps' use of congressionally-appropriated money, making sure funding was being spent the way Congress intended. If money is designated for a study, then those funds can only be used for the study, and they can't be commingled with money intended for construction.

"Congress has clearly defined what you can do with certain types of money,"

Roseberry said. "My job is to analyze what we have, what we're allowed to do with it, and report back on how we spend it. We want to make sure we get more in the future."

"Different national events can shift the focus of an administration.

You've got to be aware of trends. If you have something that's falling into this new interest, you want to promote it so you're not left out."

-Wanda Roseberry

Funding isn't consistent for the Corps. It depends on several factors, including who's in political office, economics and major events such as hurricanes.

"Some administrations are more environmentally focused, and they put more money there," she said. "Others choose flood risk management or navigation. The philosophy of different parties can shape the work the Corps is going to do."

Roseberry said that it is important to remain aware of events that influence changing trends. For example, Hurricane Katrina placed flood management near the top of the funding list.

"Different national events can shift the focus of an administration," she explained. "You've got to be aware of trends. If you

have something that's falling into this new interest, you want to promote it so you're not left out."

In another example, the weak economy spurred the administration and Congress to pass the American Recovery and Reinvestment Act, otherwise known as the stimulus bill, earlier this year.

"The district received a tremendous amount of money under the stimulus, about \$60 million was split—\$15 million to operations and maintenance, and safety, but most went to locks and dams and flood risk management."

When the money flow does slow or shift to other trends, the Louisville District's diversity of missions—it's not strictly civil works, military construction, or environmental—proves very valuable, Roseberry said.

"A few years ago our civil works took a big hit, but the military program was growing at the same time so our district has been able to absorb hits in individual programs," she said.

Roseberry has witnessed a lot of change in nearly three decades with the district, but she said the biggest progres-

sion has been in technology. There were no personal computers when she began working here in 1982, only typewriters. When the first two computers did arrive, Roseberry was given one.

"The boss got one and I got one," she said. "At the push of a button you can upload and headquarters can see what you put into the database. It also got rid of snail mail. The instant transmission of data has really transformed the way we work."

Roseberry said she isn't sure how she will occupy her time during retirement, but she's positive that it's, "Been a good career, though I'm ready for a change. I'll probably move on to social and volunteer avenues."

New faces and fond farewells

New September and October employees



Christopher Bennett
Small Craft Operator
Operations Division



Elizabeth Beyer
Project Management
Specialist
P3MD



Ken Beyer
Public Affairs Specialist
Public Affairs Office



Dervis Brown
Construction
Representative
Fort Knox



Brad Faulkenburg
Civil Engineering
Technician
Fort Knox



Jennifer Hanson
Administrative Support
Assistant
Engineering Division



Jesse Steven Helton
Biologist
Planning, Programs, and
Project Management



Gary Lynn Jarrett
Biologist
Planning, Programs, and
Project Management



Daniel Jones
Realty Specialist
Real Estate Division



Jenny Larson
Student Trainee
Construction Division



Craig Moulton
Mechanical Engineer
Operations Division



Josh Mudd
Navigation Structural
Engineer
Engineering Division

Not pictured:

Mark Brohm, office automation assistant, P3MD
Michael Fennesy, lock and dam operator, lock 53
Kenneth Haywood, construction control representative, Fort Campbell
Pamela Lozier, realty assistant, real estate division
Charlene McCarthy, student trainee, construction division
Andrea Michelle O'Bryan, biologist, P3MD
Mary Smith, project support assistant, P3MD
Steven Smith, construction control representative, Fort Knox
Charles Thomas, engineering aid, Fort Knox
Maria Thomas, project support assistant, engineering division

September and October Retirements

Mary Kleinke, engineering division
Donna Murphy, resource management
Michael Potts, operations division
Wanda Roseberry, project management
Thurston Sullivan, engineering division
Ronald Traversy, lock 53
Vicki Turner, operations division

By the numbers

Louisville District totals

- 1,365 employees
- 21 Department of the Army interns
- 21 volunteers deployed

Holiday Recipes



Silly Millie Stille's Cherry Walnut Cake

Contributed by Doreen Rogers

Ingredients:

- 1/2 lb. butter
- 2 cups sugar
- 4 eggs, slightly beaten
- 1 tsp. baking powder
- 2 cups flour
- 1 tsp. vanilla
- 1 cup sour cream
- 1 cup chopped nuts
- 1 10-oz jar maraschino cherries (cut in half)

Directions:

1. Preheat oven to 350 degrees. Grease and flour bundt pan.
2. Cream together butter and sugar. Add eggs and vanilla. Mix baking powder and flour together, add to mixture. Fold in sour cream, chopped nuts and cherries.
3. Pour into bundt pan. Bake for 1 hour and 15 minutes, until cake pick comes out clean. Cool on wire rack for 15 minutes. Invert onto serving plate. Dust with powdered sugar when cooled.

Doreen's Additions:

When cake comes out of the pan, poke holes all around the cake with a toothpick, then brush completely with ¼ cup of cherry liqueur. Let cool. Add another ¼ cup of cherry liqueur to warm vanilla frosting (about ½ jar) and drizzle over cake. Garnish with a few chopped cherries.

Decadent Fudge Cake

Previously published in an unknown cookbook

Contributed by Angie Puckett

Ingredients:

- 1 cup butter or margarine, softened
- 1 1/2 cups sugar
- 4 eggs
- 1 cup buttermilk
- 1/2 tsp. baking soda
- 2 (4-ounce) bars sweet baking chocolate, melted and cooled
- 1 cup chocolate syrup
- 1 1/2 cups semisweet chocolate mini-morsels, divided
- 4 oz. white chocolate, chopped
- 2 tbsp. plus 2 tsp. shortening, divided

Directions:

1. Cream butter in a large mixing bowl; gradually add sugar, beating well at medium speed of an electric mixer. Add eggs, one at a time, beating well after each addition.
2. Combine buttermilk and soda, stirring well. Add to creamed mixture alternating with flour, beginning and ending with flour. Add 2 bars melted chocolate, choc. syrup, and vanilla. Mix well. Stir in 1-cup mini morsels.
3. Pour batter into a heavily greased and floured 10-inch bundt pan. Bake at 300 degrees for 1 hour and 20 minutes. Invert cake immediately onto a serving plate and let cool completely.

4. Combine 4 ounces white chocolate and 2 tbsp. shortening in top of a double broiler; bring water to a boil. Reduce heat to low; cook until melted and smooth. Remove from heat. Drizzle mixture over cooled cake. Melt remaining 1/2 cup mini-morsels and 2 tsp. shortening in a small saucepan over low heat, stirring until smooth. Remove from heat, and let cool; drizzle over white chocolate.



Sugar-Free Chocolate Pie

Contributed by Mary Alice Wright

Ingredients:

- 1 stick butter
- 1 cup flour
- 2/3 cup nuts, chopped
- 1 bar (8 oz) cream cheese
- 1 tub (8 oz) sugar-free Cool Whip, divided
- 2 cups cold skim milk
- 2 boxes Jell-O sugar-free chocolate pudding
- 1 square semi-sweet chocolate

Directions:

1. Combine butter, flour and nuts. Mix well and pat into bottom and side of pie pan. Bake 20 minutes at 350 degrees. Cool. (May use graham, shortbread or chocolate pie shell)
2. Beat softened cream cheese, add half the container of Cool Whip and mix until smooth. Spoon into crust.
3. Whisk pudding and milk for 2 minutes. Pour over the cream cheese mixture. Top off with the rest of the Cool Whip.
4. Melt chocolate in microwave. Use fork to drizzle melted chocolate over pie.

5. Place in refrigerator until ready to serve.



Mary Alice Wright

Tiger salamander found at Barren River Lake

Contributed by Libby Watt, Barren River Lake

The tiger salamander (*Ambystoma tigrinum*) is the largest land salamander in the world and this one was the first ever reported in Allen County, Ky., at Barren River Lake. A voucher photo was taken and submitted to the Kentucky Department of Fish and Wildlife Resources for the account.



Louisville District job vacancies

The following positions are pre-identified for deployment overseas in support of contingency operations and are designated as emergency-essential:

Engineering Division

Annual Salary: \$66,199 - \$129,696

Duties: Function as assistant branch chief and principal advisor to the branch chief on actions related to the engineering design of projects assigned to the Louisville District. Shares equally in authority and responsibility with the branch chief in the management of the branch.

Construction Division

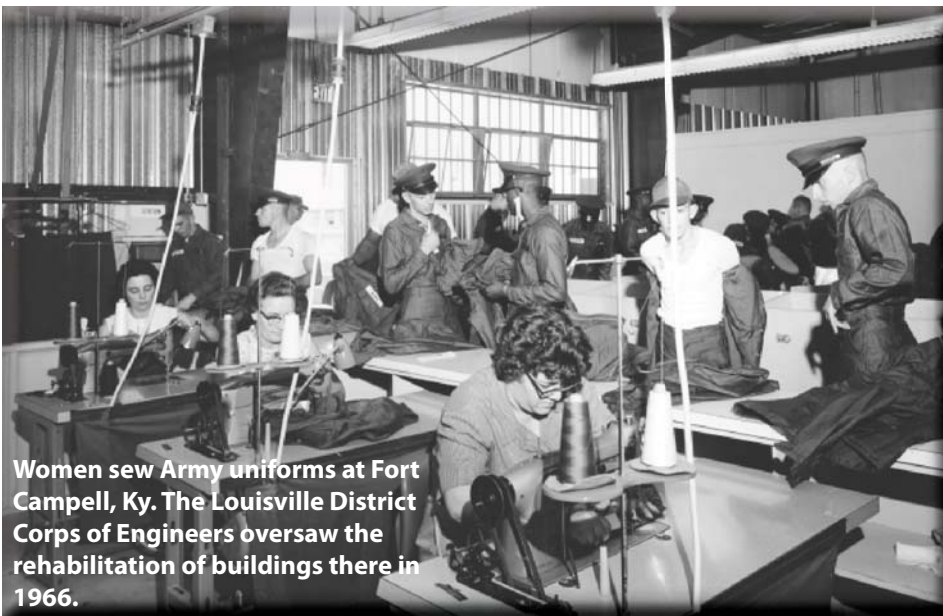
Annual Salary: \$66,199 - \$129,696

Position may be filled at any one of the following area offices: Wright-Patterson Air Force Base, Fort Campbell, Scott Air Force Base, Fort Knox or Louisville District Office

Duties: Serves as area engineer with complete responsibility for all construction activities in assigned geographical area.



Snapshot from the past



Women sew Army uniforms at Fort Campbell, Ky. The Louisville District Corps of Engineers oversaw the rehabilitation of buildings there in 1966.

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US Army Corps
of Engineers
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