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Louisville District

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District Commander
Col. Christopher G. Beck
Public Affairs Chief
Todd Hornback

Send articles to Louisville District Public Affairs office at:
sarah.r.mattingly@usace.army.mil

U.S. Army Corps of Engineers
CELRL-PA
P.O. Box 59
Louisville, KY 40201-0059

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On the cover: *Contractors work on pieces of the steel trusses that will comprise the fourth building of the National Air Force Musem.*

Please conserve:
Think before you print.

Commander's Comments

Ladies and Gentlemen,

Over the past couple of months I have had several opportunities to interact with senior Headquarters USACE leaders as well as countless representatives from businesses, large and small, throughout the United States that have done business with the Louisville District. I want you to know that throughout these engagements, one theme has been repeated over and over again – people like working with the professionals in the Louisville District. This strong reputation does not happen accidentally and is not sustained without a lot of hard work from everyone. You should all be very proud of that reputation but also never rest on our past performance; we need to continue to work hard each and every day.

This edition of the Falls City Engineer reinforces that reputation and great performance throughout the nation (and frankly the world). Whether it is developing the Germplasm Conservation Orchard at Green River Lake, expanding the very high visibility National Museum of the U.S. Air Force in Ohio, Emergency Operations coordination with multiple federal and state agencies, or Jesse Scharlow working in the Japan District to help them fulfill requirements; the Louisville District provides value to the nation in many areas and many locations.

Our teams are working on projects that are essential to the well-being of many customers and stakeholders, but also small towns and communities throughout our footprint. I remain impressed with the personal pride that you put into these efforts as we work together to provide value to the nation.

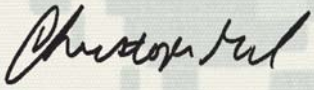
Col. Christopher G. Beck
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

Finally, I want to wish everyone Happy Holidays and look forward to seeing you all back in 2015! I hope you are able to spend time with friends and family enjoying the holidays. Please be safe as you enjoy some time off, particularly if you are traveling.

Thanks again for all that you do!

Building Strong!

Chris



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American chestnuts to take root at Green River Lake

Keith Chasteen

Eric Gracey, Kentucky Division of Forestry, points out a two-year-old American chestnut stump sprout in Fort Knox, Ky.

The American chestnut, once ubiquitous over millions of acres of eastern hardwood forests, was virtually wiped out in the early 1900s when a fungus known as chestnut blight was brought to the United States on imported Asian chestnut trees. While American chestnut trees continue to sprout from old stumps and root systems, the blight prevents them from reaching maturity. In recent decades, organizations like the American Chestnut Foundation have worked to restore the population by cross-breeding American chestnut trees with the blight-resistant Chinese chestnut.

Keith Chasteen, operations division

The Kentucky chapter of the American Chestnut Foundation (TACF) is working with the U.S. Army Corps of Engineers (USACE) to develop a Germplasm Conservation Orchard (GCO) for the American chestnut tree at Green River Lake in Taylor County, Kentucky. A GCO is a repository for pure American chestnut gene sources. Specifically, this GCO is to be a source for genetic material from the Knobs Physiographic Region in central Kentucky.

Stump sprouts can be transplanted to the site, nuts from mature native trees can be planted and cuttings can be grafted and planted in the orchard. Once in the orchard, trees can be nurtured with fertilizer, water and insecticides and fungicides while they grow in full sunlight. The goal is to protect the trees and encourage them to mature to flowering, at which point pollen can be gathered from them or brought to them to create new genetic lines for Kentucky's backcross breeding program. After providing new genetic breeding lines, these trees can continue to be cared for in order to provide a source of pure American nuts. As the Kentucky chapter of TACF develops backcrossed lines, these trees will be introduced back into the forests of Kentucky.

Kentucky chapter TACF members Tim Sheehan, Matt Strong, Kerrin Hester, Rick Caldwell and Jimmie Sizemore, along with Larry Lemon, Green River Lake, Keith Chasteen, Louisville District operations division, members of Kentucky Division of Forestry and U.S. Army personnel from Fort Knox have searched for American chestnut trees on Fort Knox with some success. The primary search area is a unit where thinning and harvesting activities occurred in 2012. The resulting increase in sunlight to the forest floor has promoted rapid growth of stump sprouts. After two growing seasons, the sprouts can now readily be found within the forested environment.

In February, volunteers will return to Fort Knox to dig some of the sprouts that have been found. The sprouts will then be transported to Green River Lake to be planted immediately. Many known sprouts will be left at the Fort Knox site so that the natural chestnut source is not completely removed. However, due to chestnut blight, it is not anticipated that these trees will reach flowering maturity in nature.

The Green River Lake location is approximately half an acre. Each tree will be planted in a 20' x 20' plot, providing space for approximately 48 trees. The Kentucky chapter of TACF will fund an electric fence for the orchard to keep deer away. Some funds were raised through a silent auction at the Kentucky TACF chapter's annual meeting at Lake Cumberland Aug. 23, 2014. The remaining funds were approved by the chapter's board members during the quarterly board meeting in November 2014. These funds come from portions of memberships and donations made to the Kentucky chapter.

As other Knobs Region genetic sources are found, they can be used in the Green River Lake GCO to further develop backcross lines from within this region of Kentucky.

Fort Knox Natural Resources Branch

Some of the American chestnut stump sprouts found at Fort Knox, Ky., will be transplanted to the new Germplasm Conservation Orchard at Green River Lake.

Olmsted Dam Navigable Pass Monolith placed

Carol Labashosky, public affairs

On November 21, the Olmsted Dam project team met a significant milestone. The Olmsted team successfully "set" or placed Navigable Pass Monolith 1 for the 2014 low water season four days ahead of schedule. The team also raised Tainter Gate Number 1 to its dogging beams as the photograph illustrates. The subsequent tremie concrete placement completed the installation associated with Navigable Pass-1. The Olmsted dam construction project on the lower Ohio River will replace Locks and Dams 52 and 53. The navigable pass—when raised—creates the pool which enables tows to lock through.

Mick Awbrey

Reserve

88th Regional Support Command honored

Louisville District's Michigan City Army Reserve Center project receives kudos

USACE

Standing with Michigan City, Ind., Mayor Ron Meer after being presented a Business Investment Award during the Economic Development Corporation of Michigan City's 2014 Business Investment Awards Celebration, are Col. Kurt Wagner, 88th Regional Support Command; Staff Sgt. Antoine Ramsey; and Sgt. 1st Class Angel Avery, 624th Quartermaster Company.

USACE Rendering

The Michigan City Army Reserve Center has made economic impacts in the area.

Carol Labashosky, public affairs

On Oct.8, the 88th Reserve Support Command's Col. Kurt Wagner accepted an award which was bestowed in recognition of the significant positive impact made with the completion of the Michigan City, Indiana, Army Reserve Training Center and the nearly 300 Soldiers who utilize the facility. The Louisville District managed design and construction of the project. The dinner event recognized local companies that have made substantial investments in the community during the past two years. A crowd of nearly 200 attended the celebration including elected officials and leaders in local businesses, not-for-profit organizations and education representatives.

"The Michigan City Army Reserve Center project had strong support from the Mayor's office and Economic Development team," said Tom Murphy, project manager.

On site construction management was provided by the Illinois Resident Office. Project design was provided by the AE Firm: RSP Architects. Project construction was provided by Better Built Construction Services, Inc.

National Air Force Museum widens wingspan

Katie Newton

The structure of the new fourth building of the National Air Force Museum mirrors the design of the three existing hangars.

Katie Newton, public affairs

The National Museum of the United States Air Force—the largest military aviation museum in the world—is getting even bigger. The mega-expansion includes a new fourth building with 224,000 square feet of exhibition space.

The U.S. Army Corps of Engineers (USACE) Louisville District awarded the $35.4 million contract for the expansion project to Turner Construction Co., Washington, D.C., which broke ground in June 2014.

The new, sustainably-designed building, which has been registered Leadership in Energy and Environmental Design (LEED) Silver by the U.S. Green Building Council will mirror the design of the three existing hangars. The fourth hangar will house aircraft from the museum's Presidential Aircraft, Research and Development and Global Reach collections, as well as a new and expanded space gallery.

Contractors are currently working on hoisting up the steel trusses to complete the building's massive structure.

"It's amazing. It's like watching a dream come true," said Fran Duntz, Chairman of the Air Force Museum Foundation. "It's great to see it come up."

The Air Force Museum Foundation, a non-profit organization chartered to assist in the development and expansion of the museum's facilities has helped raise nearly $40 million and continues to raise funds toward their goal of $46 million, which would provide for further options like a west tow path and extension, theatrical lighting, a Titan 4B stand, science, technology, engineering, and mathematics (STEM) learning nodes, and wireless capability in the building.

At this point the project is nearly 40 percent complete with the underground utilities and foundation work finished.

"Things change every day out here," said Museum Director, Lt. Gen. (Ret.) Jack Hudson. He later added, "It really is an Army that's working back here. It's well orchestrated that's for sure."

The planning efforts of everyone involved have helped to ensure the project stays on schedule and within budget. Crews will continue working through the winter months, with extra days built into the schedule to account for inclement weather, to complete the frame and roof.

Tim Walsh, Turner Construction Manager, says the project is on schedule and expects that by the end of January the entire structure will be up.

The next phase of the project requires temporary closure of the Missile and Space Gallery, which will connect to the new building. Starting on Dec. 8, the gallery will close for approximately five months so new entrances can be formed on the first and mezzanine levels linking the hangar to the rest of the museum.

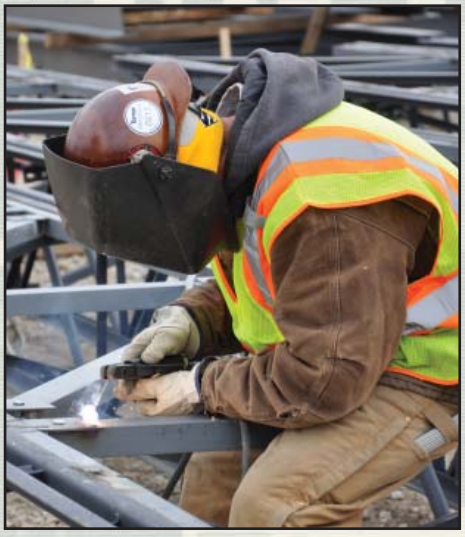
Although the closure creates an inconvenience, the benefits are worth the wait, according to Hudson.

"The fourth building will bring many advantages including the relocation of the popular Presidential and R&D gallery aircraft from a controlled-access portion of Wright-Patterson Air Force Base to the main museum campus where they will be accessible to all visitors along with the Global Reach Gallery and expanded Space Gallery."

The building will give the museum space to display artifacts that have been kept in storage such as the Titan IV launch vehicle, or ones kept outside in the elements such as the C-141 and C-130E.

The new addition is expected to open in spring 2016 to the one million visitors from around the world who visit the museum each year.

"We are happy to be working with the Air Force Museum Foundation and Turner Construction to provide space for displaying historic artifacts that will continue to tell the story of the U.S. Air Force for years to come," said Michael Moore, USACE Louisville District project manager.



Katie Newton

A contractor works on welding pieces of the steel trusses that will comprise the fourth building's structure.

Suite life in store for 101st Airborne Division

Barracks at Fort Campbell exceed standards for single Soldier living

Lisa Swan, Sundt Construction, Inc.

The steel structure and fabricated wood wall panels are going up on the new HHB Barracks, which will house Soldiers from the 101st Airborne Division at Fort Campbell.

Katie Newton, public affairs

Walls are going up on a new three-story Headquarters and Headquarters Battalion (HHB) barracks, which will house 296 Soldiers from the 101st Airborne Division at Fort Campbell giving them fresh, modern facilities designed to improve the quality of life for single Soldiers.

Fort Campbell, located on the Kentucky-Tennessee border, is home to the only Air Assault division in the world—the 101st Airborne Division. The HHB barracks Unaccompanied Housing (UH) project is one of the few projects providing modern facilities for the 101st Airborne Division.

"This project holds great significance to Fort Campbell and specifically to the Soldiers of the 101st Division," said Rodney Boyd, project manager, U.S. Army Corps of Engineers (USACE) Louisville District. "The opportunity to provide living quarters that have the latest technology and building systems with a sense of comfort and convenience for Soldiers is a great honor."

The Louisville District awarded the $25.75 million project to Sundt Construction, Inc., Tempe, Arizona, which began work in March 2014. The project—nearly a quarter complete, with fabricated wood wall panels being erected in November—is expected to be ready to house Soldiers by October 2015.

The more than 110,000 square feet will include 148 suites, featuring apartment-style units with two bedrooms and one bathroom each.

"The most important part of the new HHB barracks is that it will exceed the Army's current standards for single Soldier living environment," said Marvin Brown, Fort Campbell housing specialist.

The modern barracks will be equipped with bigger common areas with flat screen televisions, pool tables and foosball tables, an internet café and separate living spaces making them more comfortable for the single Soldiers who reside there.

"We are committed to the quality of life of the single Soldier," said Brown. "So with every new barracks built, we feel that we are accomplishing that inherent commitment to our Soldiers."

The new facility was designed with sustainability in mind and meets Leadership in Environmental Design (LEED) Silver certifications by the U.S. Green Building Council. Planning and design processes helped to establish goals for the site, energy, water, materials and indoor environmental quality that would have to be followed throughout the design, construction and the lifecycle of the building. Some features include water reduction measures like low-flow toilets and shower heads. Measures were also put in place to optimize energy performance and reduce environmental impact through the use of recycled content and waste diversion.

"This project will get Soldiers out of less desirable accommodations and enable the demolition of antiquated barracks of yesteryear," Brown said.

The barracks will replace the old Hammerhead barracks, built during the Korean War era approximately 65 years ago, which are being demolished.

USACE rendering

A rendering of the new three-story HHB barracks at Fort Campbell that will house 296 Soldiers.

Wright-Patt Hospital renovation nearing completion

Katie Newton, public affairs

With fewer than 100 days in the project schedule, time is ticking to complete the major $90 million renovation of the Medical Center Complex at Wright-Patterson Air Force Base in Dayton, Ohio.

The hospital on base, which serves Soldiers and their family members, is currently 94 percent complete and is scheduled to be fully operational by mid-March 2015.

"The magnitude of the renovation and the number of moving parts is really incredible," said Steve Farkus, project manager with the U.S. Army Corps of Engineers (USACE) Louisville District, which oversees the project. "It has taken a lot of coordination and great partnerships to ensure smooth transitions."

The project involves renovating the 1950s-era hospital to a state-of-the-art health facility with an overhauled Intensive Care Unit (ICU), new dining facilities, updated patient rooms, surgery areas, office areas and a dental clinic. Renovations to more than 260,000 square feet of the facility are helping to modernize 30 different departments throughout the hospital.

The construction contractor, Walsh/Butt Joint Venture, is focused on the schedule and getting this project turned over to the 88th Medical Group this spring.

Only five of the 30 departments still remain under construction, with one of the biggest areas—the kitchen and dining facilities—winding down by the end of December.

"Our short-term focus is on the dining facility and getting that complete and being able to turn that over by Christmas," said Matt White, Walsh/Butt Joint Venture. "We're still on target so that hopefully by the first week of January they will be live in the kitchen using the facility."

The new kitchen and dining area will be turned over to the hospital staff, complete with new serving stations, state-of-the-art pizza oven, a high efficiency dish washer capable of handling over 14,000 dishes per hour, advanced fire suppression systems at the kitchen exhaust hoods, a spray master sanitation system that consists of central and remote stations, a dining room and conference room seating for approximately 160 and 92 respectively. The total renovated kitchen area is about 20,000 square feet.

The unexpected finding of asbestos during the renovation and expansion of the kitchen and dining facilities was one of the biggest hurdles of the project.

"There were numerous issues which included everything from additional asbestos abatement to mechanical and kitchen equipment utility changes that impacted the time to complete this area," said Jeremy Cobb, USACE resident engineer. "Everybody came together to solve the issues and turn over a newly-renovated dining facility that all visitors and staff can enjoy."

Katie Newton

Contractors put the finishing touches on equipment in the food service area, which will be open for use by the end of December.

Another critical point of the project included a three-month complete shutdown of the hospital's Intensive Care Unit (ICU). The renovation involved lots of planning and coordination between the project team and the hospital to minimize impact on the user.

"The work of everyone involved is increasing patient care at the Wright-Patt Medical Center and that is something everyone can be proud of," said Farkus.

The groups involved include the 88th Medical Group, 88th Civil Engineer Directorate, Air Force Civil Engineer Center, U.S. Army Corps of Engineers Louisville District, the construction contractor Walsh/Butt Joint Venture and the design contractor HKS/WS.

One thing all parties involved in the project have kept at the forefront is safety. The Walsh/Butt Joint Venture (JV) logged more than 505,000 man hours worked over the course of 1,134 days with zero lost-time accidents, injuries or impacts to the project. The JV celebrated with the tradesmen Dec. 3, by recognizing them for their successes and reinforcing the importance of safety while they finish the mission at the hospital.

Continued on page 8

Katie Newton

The recently-completed chapel will provide patients and visitors a place for quiet reflection.

Continued from page 7

In early December during a senior advisory group meeting, which brings all parties together for a project update, everyone seemed thrilled that the project was nearing the finish line. “Thanks to everyone for their efforts in trying to get this project wrapped up,” said Farkus.

Margarita Tuss, Wright-Patterson Air Force Base 88th Civil Engineer Directorate, shared her enthusiasm as well. “I just want to express my gratitude. It’s been a long journey. We’ve been at this for over three years and I express my gratitude for everyone’s efforts to see it to completion.”

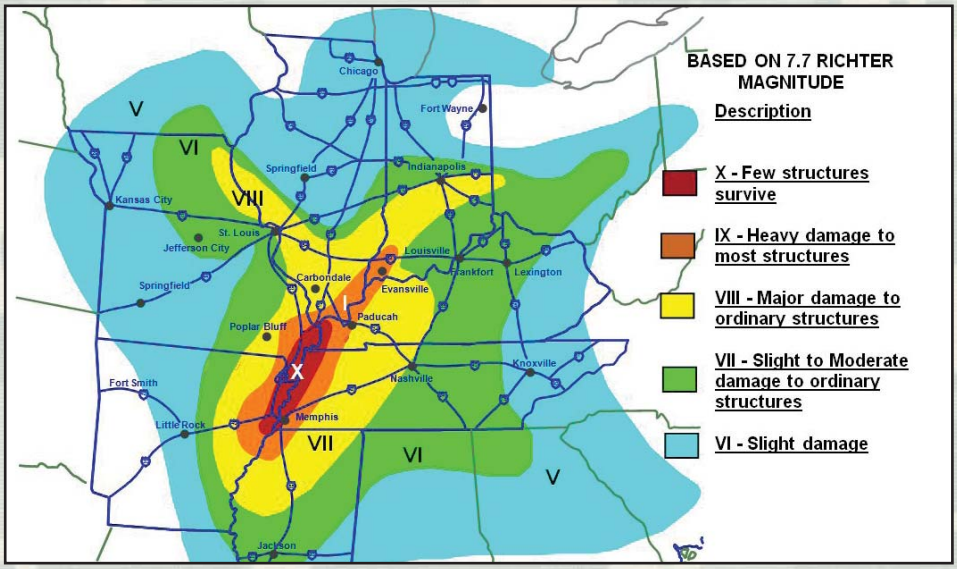
A ribbon-cutting is being planned for spring 2015 to unveil the new facilities.

Katie Newton

Team members tour the new, sleek dining facility at the hospital Dec. 4, 2014.

Emergency Operations

Multi-agency workgroup explores potential disaster scenarios



USACE

This graphic simulates an earthquake similar to the ones that occurred from Dec. 1811 to Feb. 1812 at New Madrid, Mo.

Carol Labashosky, public affairs

The U.S. Army Corps of Engineers Louisville District will form a working group to address issues that could potentially arise on the Ohio River in an emergency scenario, such as an earthquake on the New Madrid fault, or other natural disasters.

The Emergency Operations Center hosted a meeting in early December to brainstorm and articulate some examples of consequences of a potential natural disaster. Representatives from agencies such as Kentucky Emergency Management, the Coast Guard, Federal Emergency Management Agency (FEMA), Department of Transportation (federal and state) and the Environmental Protection Agency (EPA) are government candidates for the working group. Industry groups, barge associations and port authorities would also be important stakeholders in the planning process.

Attendees discussed different scenarios such as keeping the navigable channel open or clearing the channel, which in itself could take months, the group agreed, depending on the natural disaster; having an emergency response plan for navigation; and clearing a collapsed bridge out of the channel.

“If the river shut down (in an emergency), lost revenue equals $1.2 billion,” said Don Walker, emergency operations.

Walker said the Corps’ goals would be to clear the navigation channel, open the locks and clear the river.

As with a flood, Corps personnel would likely deploy to the State of Kentucky Emergency Operations Center when it would be activated in a New Madrid earthquake.

Barry Vessels, operations, said, “We would use equipment to move material; the river would readjust.” Vessels and his cadre have sophisticated river mapping systems which are used widely and would be helpful during an emergency.

Walker said this will be the first meeting that will initiate a plan and move it forward.

“It’s a good start,” he said.

Contracting's Scharlow ends fiscal year with Japan District

Carol Labashosky, public affairs

Jesse Scharlow, Army Corps of Engineers Louisville District contracting specialist, received a commendation for his outstanding support to the U.S. Army Corps of Engineers Japan District (JED) Contracting Office. He worked at JED for four months to assist with JED's fiscal year contract closeouts during the summer and fall of 2014.

Courtesy Jesse Scharlow

Jesse Scharlow summits Mount Fuji during a four-month stint in the USACE Japan District.

What was your assignment?

I worked as a senior contract specialist responsible for contract execution and fiscal year closeout for the JED. My primary function was to ensure all Architect-Engineer (A/E), construction, and small purchase actions were completed before the end of the fiscal year.

End of year contract closeouts are challenging and are notorious for their short suspenses. What were the circumstances at JED?

The Japan Engineer District had approximately 130 A/E and construction actions that were required to be completed at the end of fiscal year 2014. The JED contracting team was tremendously short staffed and required assistance in order to meet their mission.

How did you come to learn of this assignment? Would you encourage others to take on new challenges like this?

Army Corps of Engineers Headquarters announced the opportunity, and I was competitively selected among GS-12 and GS-13 contract specialist candidates USACE-wide.

I would highly recommend Louisville District employees take advantage of challenging assignments of this nature. Not only does this opportunity allow you the chance to grow in your respective field, it opens your mind to exciting new possibilities and experiences, and it provides a truly global perspective on USACE operations worldwide.

What projects did you work on?

I supported JED by leading the contracting team on the execution of five new A/E Indefinite Delivery Contracts, the design of a Flight Simulator Facility, and the construction of the following projects: replacement of the Sasebo Elementary School, Sasebo Naval District, Japan; commissary construction at the Sagamihara Housing Area, Zama, Japan; health clinic additions at Camp Zama, Japan; and various renovation projects to the Japan Engineering District building.

In addition, I assisted with the creation of the highly visible $295 million and $495 million Multiple Award Task Order Contracts. These contracts are required to support the Army, Navy, Air Force and Marines, as they provide mission command in support of contingency operations, and in support of the defense of Japan.

Let's hear about some of the things you did in your spare time.

I climbed Mount Fuji, Japan's highest volcano and peak at 12,388 feet. Climbing Mount Fuji is considered a spiritual journey for the Japanese, and the vast majority attempt to summit the mountain once in their lifetime.

"You are wise to climb Mount Fuji, but a fool to do it twice." — Japanese Proverb

What's your take on the Japanese culture?

Japan has an interesting and complex culture; on the one hand it is immersed in tradition dating back thousands of years; on the other, it is a society in a constant state of change, with frequently shifting trends and technological advancement. It could be said that Japan is a country of stark contradictions and this is in part what makes it such a captivating country.

Courtesy Japan Engineer District