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U.S. ARMY CORPS OF ENGINEERS LOUISVILLE DISTRICT

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Falls City Engineer

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On the cover: Colors paint the sky over the Ohio River at Lock 53 at Grand Chain, Illinois. (USACE Photo by Daniel Johnson)

Please conserve:
Think before you print.

Commander's Comments

Ladies and Gentlemen,

Good news is the weather is finally breaking and it looks like we got through with a pretty light winter. I know that Derby is coming quickly and a lot of you will be out celebrating with friends and family. A lot of you will also be traveling over the summer, getting out on the water (hopefully at our lakes), going to the beach, grilling out, etc...so please ensure that you are doing it safely and you can truly enjoy relaxing.

We often discuss our value to the region as part of the Louisville District and you will see examples of that in this issue with our work at the Fort Campbell Schools and the Allison Aquatics Facility, but this issue also highlights the personal commitment of many of our folks to supporting our nation in critical times. Recently we had Steve Zalis deploy to Mosul, Iraq and support the Dam Task Force, as well as six employees deploy in support of Louisiana flood recovery. I remain truly humbled by the commitment and selfless service of our workforce as they take time away from family to support these critical national and global needs.

Finally, highlighting personal commitment, I want to congratulate Mona Waldeck as she completed the Bataan Memorial Death March to honor POWs. She represented our district at that grueling event and made us all proud.

I will conclude by highlighting that I remain proud of the hard work each of you



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

puts in daily. Our program continues to progress well this year and we are working through many challenges (like Lock & Dam 52 and Green River Dam 6) that pop up at the last second. I appreciate your efforts and professionalism daily. Thanks again for all that you do!

Building Strong and Taking Care of People!

Chris

Churdon tul

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Corps removes Green River Dam No. 6

Carol Labashosky, public affairs

U.S. Army Corps of Engineers
Green River Lock and Dam No. 6
near Brownsville, Kentucky, has been
removed. The removal was performed
by experienced dam removal personnel
under an interagency support agreement
between the Corps' Louisville District
and the U.S. Fish and Wildlife Service.
Other participating agencies were
Kentucky Department of Fish and Wildlife
Resources, Mammoth Cave National Park,
The Nature Conservancy and Kentucky
Waterways Alliance.

A decision was made to remove the lock and dam because it was failing in place and posed safety risks. An uncontrolled breach occurred in November of 2016. There was a failure in several sections of the dam to include structural damage, such as cracking and tilting of the lock walls.

The Louisville District's biggest concern and reason for pursuing the removal was to remedy the public safety risk for those who use the area for recreation using kayaks and canoes. "Demolition and removal of Green River Dam No. 6 has multiple benefits. First it removes a very dangerous safety hazard that was created with the entire flow of the river passing under the dam and lock," said Mike Turner, Lousville District biologist. "Anyone drawn into this would have had no hope of escape or survival."

"For removal, we knocked down the lock walls, placed the debris in the lock chamber, and graded and seeded two slopes, so it looks just like the river bank. Floods or even just high water will transport tree seeds to the exposed soils where they will sprout and cover the slope within one to three years," Turner said.



Site of the former Dam No. 6 on the Green River shows a now free flowing river.



The excavators break up Dam No. 6 while building a work pad from which to remove material during the demolition, which was completed in April.

The lock and dam were removed using hydraulic hammers with some of the excavated rock being placed in the lock chamber. The removal took approximately 16 days. An experienced dam removal team with Fish and Wildlife service who specialize in this unique demolition had done similar work in Texas, North Carolina and up the east coast.

The dam's removal means that the river will be open for recreational traffic with better access, especially kayaks and canoes, with nearly all trips ending at the ramp in Brownsville. This will increase tourism with economic benefits to local businesses.

There will be some positive environmental aspects as well, according to Turner.

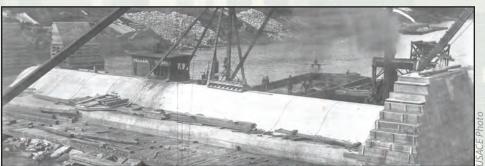
Once a dam is removed, the water will once again take on natural characteristics of a free flowing river system. "We expect to see the return of many mussel species, some endangered, especially within the upper eight miles of the former pool of Dam 6." said Turner.

Without the dam, there will be elimination of unnatural water levels within a large part of the Mammoth Cave and improvement of riverine habitats for aquatic organisms including endangered mussels, darters and sport fishes such as smallmouth bass and muskellunge.

The Green River is one of the most biodiverse rivers in the country. It is home to more than 150 fish species, more than 70 mussel species and many threatened or endangered species.

"The thing that stood out to me is that everybody played their role and the mechanisms were in place to remove the dam," said Lee Andrews, state field office supervisor, U.S. Department of Fish and Wildlife Service. Federal legislation was signed in December of 2016 deauthorizing the dam from the Corps inventory and directing its removal.

The lock and dam was built in 1904-1905 and put into operation in 1906. The Corps closed the project in August 1951.



The Green River Lock and Dam No. 6 was originally constructed in 1904-1905 and put into operation in 1906. Wooden barges were used to haul asphalt and sandstone. The Corps closed the project in 1951.

Louisville District making a difference for river navigation

Lori Kullberg, executive office

The U.S. Army Corps of Engineers shares a multi-agency mission with the U.S. Coast Guard and National Oceanic and Atmospheric Administration to maintain navigable waterways in the United States and develop more effective and efficient inland river and maritime systems.

Louisville District's navigation team has worked with the electronic Navigation Information Systems since 2002. This is a national team effort to support and develop Navigation Information Systems such as the Inland Electronic Navigational Charts referred to as IENC, Automatic Information Systems known as AIS, and eHydro.

A partnership among the Coast Guard Office of Navigation Systems, the Coast Guard Research and Development Center and the U.S. Army Corps of Engineers Research and Development Center developed an Automatic Identification System. The AIS will transmit e-MSI messages to vessels from the Ohio River locks across the Louisville District. The messages can include information on weather, bridge clearance, hazardous cargos, safety and security zones and lock status. The e-MSI test bed will help determine the equipment and infrastructure needed to modernize U.S. waterways and make them safer.

eHydro is a Corps-wide enterprise GIS for producing hydrographic survey mapping and analysis products that

USACE can easily share with partnering agencies and private industry. Louisville District was the first inland district to implement eHydro. The Louisville team has the key role tasked to assist all other inland Districts to implement eHydro this fiscal year.

The Louisville team is developing additional software modules for the eHydro program. For example, the Channel Availability module, enables analysis of navigation channels, in aggregate and over time, for planning, budgeting, and to help with emergencies.

Another module deploys "virtual buoys" based on the latest hydrographic surveys. Using AIS, the module broadcasts a dynamic virtual buoy location to mark the navigation channel synced

with hourly gage/water surface changes. Towboat pilots can view the virtual buoy on electronic river charts on the Electronic Chart Display System in their pilot house.

Similarly, a separate module converts a hydrographic survey into an internationally-compliant IENC overlay that USACE shares with the USCG and NOAA. This enables the Coast Guard cutter crews to assess the channel, comparing previously placed buoys to the updated survey conditions on a map, while still in port. Once on site, the crew can use the overlay directly on their ECDIS showing contours and spot depths to aid buoy placement. Doing so is more accurate and saves tremendous time and money.



The inland electronic navigational charts show the location of tow boats in real-time as well as buoys that were recently placed by the U.S. Coast Guard.

River traffic resumes after Lock 52 incident

High winds caused an American Commercial Barge Line tow to hit the lock wall at Lock 52 April 5, at Brookport, Illinois. Navigation was temporarily suspended until the barge could be safely removed. Navigation resumed on Saturday, April 8.





Pollinator event to be held at McApline Locks and Dam



Keith Chasteen, operations division

This year, Pollinator Day will be held at the McAlpine Locks and Dam, Louisville, Kentucky, on Saturday, May 13. The event runs from 10 a.m. to 2 p.m. Visitors can help complete a planting to improve habitat for bees, butterflies and other pollinators.

Attendees can learn about pollinators, locking through on the Ohio River, Falls of the Ohio State Park, water safety and other topics. McAlpine Locks and Dam personnel are sponsoring the event with participation from LG&E, Greenway Landscape Services, and Boy Scouts of America.

This year's activities will include the planting of pollinator friendly trees, shrubs, and herbaceous flowering plants and the placement of solitary bee houses recently constructed by the Boy Scouts.

Around 4,000 native bee species exist in the United States and like the European honey bee, their populations are under stress due to a variety of factors. These native bees tend to be solitary nesters rather than developing hives like the honey bee. While many native bees nest in the ground, some nest in hollow stems of plants or in holes within trees created by boring beetles. The solitary bee houses are filled with hollow reeds or cardboard tubes which provide housing for many species of native bees. Although native bees do not produce honey like the honey bee, they are very friendly to be around, tend not to sting and are more efficient pollinators than the honey bee.

Declining pollinator populations have become a worldwide concern. Plantings last year at McAlpine included 1.5 acres enhanced with native flowering plants during the 2016 Pollinator Day and an additional 1.25 acres converted to native species through seeding later in the year. To enhance the native vegetation and reduce competition from non-native cool season grasses, a prescribed burn of 1.5 acres of habitat will take place in late spring at McAlpine.

Lockmaster Dewey Takacy said when talking about last year's pollinator event planting, "Even with the limited first year growth, some flowering did occur. The number of butterflies and bees had obviously increased and our need for mowing and expending that labor was reduced. I anticipate that the second year growth will result in many more flowers and should also increase the use in the area by pollinators."

One third of all agricultural output depends on pollinators. Without pollinators, many fruits and vegetables could not be produced. Within urban settings, pollinators help with backyard gardens, trees and flowers and provide enjoyment in yards. Many species of flowers depend specifically on a certain species of insect for its pollination.

This year's event will again include a barbecue lunch sponsored by LG&E. During the lunch break, participants will be entertained by Louisville-based Millers Folly Bluegrass Band.

The 2016 event saw 105 participants that came out to help. Consider making the 2017 event an even greater success for the butterflies, birds, bees and other pollinators. If you plan to take part, RSVP to Dewey Takacy at 502-774-3514.

See what the buzz is all about at Green River Lake

The Green River Lake Visitor Center in Campbellsville, Kentucky now has two interpretive, live beehives. A faux tree structure contains the hives and allows visitors to get a close up look inside of an active honeybee hive.

The Green River Beekeeping Association group will assist to keep the beehives functioning and healthy. The new exhibit features lots of educational information and activities about bees and pollinators.

Visitor Center Hours

Mon-Thurs: 7:30-5:00 Friday: 7:30-4:00 Sat. & Sun. 7:30-5:00





Corps makes waves for Army's "Night Stalkers"



The Allison Aquatic Survival Training Facility at Fort Campbell, Kentucky is used to train special operations aviators and other personnel how to survive over-water ditchings. The facility is second to none from the state-of-the-art equipment and unrivaled level of training that it offers to America's Soldiers. As pictured, the facility is currently undergoing repairs.

Katie Newton, public affairs

Sgt. Thomas Allison with the 160th Special Operations Aviation Regiment (SOAR), lost his life when the MH47 Chinook he was aboard crashed into the night sea over the Philippines in 2002 as part of Operation Enduring Freedom. At Fort Campbell's Allison Aquatic Survival Training Facility, which honors his name, special operations aviators and other personnel are trained to survive similar incidents through realistic scenarios.

"His family returns to the facility every year to watch the training and they love coming here," said Chris Smith, site manager, Survival Systems USA. "They are so thankful for the training that we provide to the unit."

The 160th SOAR, known as the "Night Stalkers," has been involved in constant combat operations since 9/11 and is highly trained to accomplish missions in all environments, anywhere in the world, day or night, with unparalleled precision. Soldiers rely on the water survival training center at Fort Campbell for mission essential training. But after eight years of corrosion issues, the facility was in need of major repairs. The U.S. Army Corps of Engineers (USACE) Louisville District stepped up to assist.

USACE Project Engineer Steve Skaggs says he's honored to play a role in improving the facility and the reason is simple: "It saves lives. This project saves lives," said Skaggs. "We've had some of the pilots tell us it is the most realistic training they have ever encountered."

The approximately \$2.4 million project currently underway is making improvements to the 10,320-square-foot facility and the 125,000-gallon pool where Soldiers experience real scenarios such as escaping from a submersed aircraft, or being recovered from the water by a rescue hoist—all in complete darkness with hurricane force winds, 4-foot waves, lightning flashes, and even simulated machine gunfire blasting from the sound system.

"That's the point of all of this is to make it all as realistic as possible," said Smith who has been the site manager of the facility since day one.

The facility uses two simulators—the Modular Egress Training Simulator (METSTM), known as the METS Model 40, which can be configured like a Blackhawk (MH60) or a Chinook (MH47) and an additional simulator replicates a Little Bird (MH6/AH6). The simulators are lifted in and out of the 16-foot deep pool by a Jib crane so that trainees can be submersed to practice a variety of scenarios they could encounter in combat situations.

"The simulators are totally reconfigurable so we can train as passengers or air crew," said Smith. "However they fly, that's how we train them."

To make the scenarios as realistic as

possible, the facility uses a variety of effects including a wave ball generator moored into the corner of the pool, which creates a sea-like state producing three to four foot waves.

"A lot of people don't like that wave ball," said Smith. "It's pretty realistic."

When training is in full force there are several environmental effects that can be applied to enhance the realism of the exercise. There are two large wind generators that produce Category 1 hurricane force winds of up to 82 mph, two downwash fans to simulate the down force of the helicopter rotors, two strobe lights to produce lightning flashes, a search light for use during hoist training, and a sound system that produces simulated sounds such as machine gun fire, helicopter noise, or an onboard warning alarm.

"When you're in the water and all the environmentals are on, you forget you're in a training situation because you're too busy getting your butt kicked," said William Feeney, Facility Manager, U.S. Army Special Operations Aviation Command.

The environmental effects provide a level of realism for training that is second to none.

"There's not another training facility like this in all of DoD that can incorporate environmental effects like the wind, waves, rain and downwash like we can," he said. "We have the environmental effects you aren't going to get anywhere else."

A safe space for practice

Trainees aren't thrown right into intense exercises like having to escape from a submersed helicopter during a simulated hurricane or machine gun fire, though—the progression is at a safe pace.

"We start them out very slow then as the day progresses we ramp up the environmentals and progress them up to a more complex environmental sea-state, and then add in the nighttime training and all the environmental effects," said Smith.

The training days begin with the Shallow Water Egress Trainer, known as SWET, where trainees can first get their feet wet with the sensation of being inverted and submerged in the shallow end

Continued on page 7

Continued from page 6

of the pool.

"Putting them in the SWET is step one before we put them in the simulators," said Feeney. "The way we do things is safer, more efficient and more beneficial to the students."

It's a safe space for practice with a ratio of one instructor to every two students, one-on-one debriefings after every attempt, and a one-touch emergency panic button that can instantly shut off all the special environmental effects if needed.

"They can screw up here because the instructors have everything under control," said Feeney. "Our number one priority is that we reassure them by being in there with them."

With SOAR, practice makes perfect. It's no secret that not everyone loves the water, or this type of training, but the instructors take the time to make sure the students get it right even if that means dragging them back in the water to try and try again.

"One of the great luxuries we have is we can train to a standard and not to a time constraint. We have the latitude to work with that student until they get the fundamentals," said Feeney. "It's very rewarding for us when we hear that a new trainee was terrified, but provides us feedback that after this course, and using this facility, that they can say 'I feel better about myself as a Soldier and I feel better about being able to complete my mission."

Corps steps in for repairs

Ensuring those Soldiers have access to training to complete their missions is a priority for USACE. The Corps' work,



Two large fans next to the pool help produce hurricane force winds—just one of the many realistic environmental effects that can be incorporated into training scenarios.

scheduled to be complete late in summer 2017, includes overhauling the facility – originally constructed in 2008— to bring the systems and building components up to appropriate standards.

Corrosion issues have been a continuing problem at the facility since training began due to the dehumidification system being inadequately undersized for the amount of moisture in the training facility. USACE is overseeing installation of a new, larger HVAC and dehumidification system with an outdoor system that is correctly sized for the training environment and will help prevent any future corrosion issues.

"This has quadrupled the size of the air handling unit and provides more capacity to dry the air in the room and control the temperatures," said Smith.

USACE is also overseeing repairs to



The new air handling unit has more capacity to properly dry the air and control the temperatures throughout the facility.

the pool liner and pool deck, corroding interior materials and finishes such as lockers in the locker room, an overhead door, electrical system components and installing a new, safer chlorination system.

"Their training is essential and we want to provide the best product we can in support of the 160th," said James Cruz, USACE Louisville District project manager, "It is critical that we deliver this project on time."

"The facility's simulators are being refurbished to align with our construction so we must maintain our schedule to minimize any impacts to them," said Cruz. The two simulators, which are being refurbished in Nova Scotia, will return to the facility this summer for testing and installation allowing the facility to resume training by September 2017.

Army breaks ground on Rock Island Housing

The U.S. Army Corps of Engineers
Louisville District helped break ground
March 24 on the the new Army Family
Housing project at Rock Island Arsenal
in Illinois, to construct 33 single family
housing units for Soldiers and their
families. Louisville District Deputy
Commander, Lt. Col. Robert Newbauer,
(pictured center) helps turn dirt alongside
Col. Kenneth Tauke, Garrison Commander
of Rock Island Arsenal, during the
ceremonial groundbreaking last month.
The project will also include a bus stop,
playground and basketball court and is
scheduled to be complete in 2018.



ean Hobel

Quality Control a slam dunk at Barkley Elementary



The new Barkley Elementary School at Fort Campbell, Kentucky has set the bar with its award-winning design and unique green features. The 142,000-square-foot facility will welcome students in the fall of 2017.

Katie Newton, public affairs

Barkley Elementary School at Fort Campbell, Kentucky, is unlike any typical cinder block school from yesteryear. The new 21st Century Department of Defense Education Activities school at Fort Campbell, Kentucky is a leading-edge facility that has set the bar with its award winning design and unique green educational features.

The \$45.2 million dollar two-story school will welcome students for the 2017 school year into a modern, adaptable and open-concept learning environment. The innovative design, architectural features and atypical construction methods of the 142,000-square-foot school led to a more complicated project though, which required a top notch Quality Control team to oversee the project.

"The design was so complex," said Danny Phelps, quality assurance representative, Fort Campbell Resident Office. "I've never seen that level of architectural detail in an elementary school. It's unbelievable."

When facilities are designed and built differently than typical construction methods it makes for extra challenges. At Barkley Elementary, those challenges included using Insulated Concrete Forms (ICF) for the structure, geothermal wells, and solar panels to name a few.

Phelps, who has worked closely with the project since dirt turned more than three years ago, says the success of the construction is all due to the quality control—or QC—team onsite.

"The quality of that structure wouldn't

be what it is without one of the best functioning QC teams I've ever worked with. They were proactively engaged from day one," said Phelps. "If there was a design issue they had it resolved due to the QC team doing it by the process."

The team Phelps is referring to includes Quality Control Manager Dave Tucker from the SBH & CORE Joint Venture along with his team of professionals including Rex White, Michael Hodge, Mark Walker and Jason Fitzwater.

Dale Charles, quality assurance team leader, Fort Campbell Resident Office adds that the USACE team onsite played a large hand in helping get it right.

large hand in helping get it right.

"The team worked hard to resolve issues of a challenging design and still provide a quality facility," said Charles.

"Danny was the glue that kept the project

Dainy was the gird that kept the project

A two-story tree made of cork welcomes students in the lobby of the new Barkley Elementary School at Fort Campbell.

team together from the first shovel of dirt to final inspection. It's a facility the team can look back and be proud of."

Phelps said in his 14 years with the Corps there has only been a handful of projects with this level of customer satisfaction and no warranty issues. "My satisfaction comes from a few warranty issues because everything works exactly as it was designed to work," said Phelps. "With minimum warranty issues in one to two years on a project you have absolutely slam dunked it."

USACE turned over the keys to the facility in March and after furniture is installed school staff will begin preparing for the school year in their new space. The facility will provide a learning environment that accommodates multiple learning and teaching styles as it features nine different neighborhoods for Pre-k through fifth grade. Each neighborhood is made up of a central learning hub surrounded by four learning studios, a group room, a one-to-one room and a staff planning room.

Additionally, there will be outdoor learning areas, including an outdoor amphitheater, and playgrounds even equipped with a tricycle track for the Pre-k and kindergarten classes.

From a rooftop learning garden, exposed ductwork and skylights in the classrooms and signage throughout the building which provide educational sustainability facts, Barkley will be a resource for students as well as the community for years to come.



Per the design, ductwork was left exposed in some classrooms to serve as a learning tool for students.

Fort Campbell High School nears completion

Katie Newton, public affairs

Construction is nearly complete on the new \$59 million Fort Campbell High School in Kentucky—the first high school in the United States designed under the Twenty-First Century Education Initiative by Department of Defense Education Activities, referred to as DoDEA.

The 184,000-square-foot school is being constructed to make room for approximately 800 students who will fill its halls in 2018. The project helps replace the existing school built in 1985 which can no longer accommodate the growing student enrollment.

"The students and staff in the existing school are currently in an old space and we are helping to bring them into a new twenty-first century space that's quiet, open and comfortable," said Mike Schlenke, project manager with Walsh Construction, which also completed the new Marshall Elementary at Fort Campbell last year.

DoDEA twenty-first century schools are intended to be more flexible and provide open, adaptable teaching areas. The high school will have eight neighborhoods with a central hub and five classrooms surrounding it, as well as one-to-one and group learning spaces.

"All of these teaching spaces are flexible," said Schlenke. "The idea is to foster team teaching and collaborative learning; it will foster the students coming together like a family."

Green features

In addition to being LEED Silver certifiable, DoDEA schools incorporate educational green features throughout to teach students about the building around them.

"Almost everywhere when you go through the school you are being told a



The ceiling of the choir room features acoustical panels designed to look like pressed piano keys.



Construction is almost complete on the new Fort Campbell High School in Kentucky, which will provide students and staff with a 184,000-square-foot state-of-the-art facility.

story through the green features," said Schlenke.

There are exposed pipes for learning about the building's components, signs on the wall that tout the benefits of recycling, and a TV panel in the main lobby to provide information about the school's energy usage. It will even include fun facts about how many Big Macs could be purchased based on the amount of conserved energy.

"It's a tool, a cool way to get them enthused with STEM," Schlenke said, "It relates it back to their daily life."

It's all in the details

The attention to details doesn't stop with green features, though.

"As you walk through the building you'll notice the patterns that start to flow through the building. The same arcs and waves and shapes flow throughout. It is very well thought out," said Schlenke, who compliments the Architect –Jacobs Engineering Group Inc.,—for the wonderful design. "They really paid attention to the details."

One example is the choir room ceiling, where at first glance one might not notice,



Contractors finish flooring in a classroom at the Fort Campbell High School.

but the acoustical panels, or clouds, are designed to look like pressed piano keys suspended from the ceiling.

"That's the kind of thought that went into this," said Schlenke. "The level of detail and the thought process of the architects is amazing."

The learning stairs in the main lobby will feature famous, historical quotes etched into the wood panels.

"It's a really prominent feature of the building," said Schlenke. "It's a gathering space where kids can talk or study. They want that sense of community. They focused on that and they definitely hit a home run here."

In addition to a student garden, an outdoor amphitheater, two gymnasiums, a soccer field, tennis courts and a running track, the school—by nature of being on an Army base—houses a JROTC air rifle range.

"Things are starting to take shape administratively from the school perspective," said Schlenke, who provided the principal and staff with a walk-through tour recently. "The staff were looking at their spaces envisioning where they would put certain things and that really helps bring it all together."

Schlenke who has worked on many schools in the past is always excited to see the project across the finish line. The project, which is currently 87 percent complete and expected to wrap-up construction in July, has approximately 90 workers on site to help get the job done.

"The Corps has been great to work with; Jacobs, the architect, has been great to work with; we've held together as a team very well here," said Schlenke. "It's been very, very positive."

Reserve breaks ground on New Jersey training center



The U.S. Army Reserve broke ground March 18 on the new Joint Base McGuire-Dix-Lakehurst Army Reserve Center, which will be used to train approximately 600 Army Reserve Soldiers.

By Staff Sgt. Shawn Morris, 99th Regional Support Command

The U.S. Army Reserve marked another milestone in helping its Soldiers remain a trained and ready part of the Total Force by breaking ground March 18 on a new Army Reserve Center.

The \$20 million, state-of-the-art facility will offer the latest in training and administrative resources to include classrooms, a learning center, a library and a weapons simulator.

"As commanding general of the Army Reserve's 99th Regional Support Command, one of my primary responsibilities is to support the 44,000 Army Reserve Soldiers living and serving throughout the 13 northeastern states by providing the facilities in which they can prepare for deployments and other missions when the nation calls," said Maj. Gen. Troy D. Kok, who hosted the event.

"This facility represents the next step toward ensuring that America's Army Reserve remains the most capable, combat-ready and lethal federal reserve force in the history of the nation," he continued.

The 87,000-square-foot training center is scheduled to be home to approximately 600 Army Reserve Soldiers in 15 units and detachments currently occupying a dozen

base facilities.

"This facility matters because it will support, encourage, train and help enable our reserve component to be ready when they are called on for service," said U.S. Representative Tom MacArthur, representing New Jersey's 3rd Congressional District.

"I want to honor every man and woman who's serving in every capacity in all branches of service in our nation's military, whether it's active duty or reserve component, whether it's combat or support, whether it's people who will never be put in harm's way or are in harm's way every moment – every man and woman in uniform matters to our nation's defense," he added.

Consolidating these units in this new Leadership in Energy and Environmental Design Silver facility will allow the Army Reserve to reduce its impact on the environment while at the same time saving taxpayer money.

"These fiscal, environmental and operational benefits leave no doubt that today is a great day for the Army Reserve and for the Soldiers who will one day call this facility home," Kok said.

The facility is scheduled to open in January 2019.

Operational Readiness Training Complex cuts ribbon

Carol Labashosky, public affairs

A ribbon cutting ceremony was held in February for the Operational Readiness Training Complex located at Fort Hunter Liggett, California. The project was completed in March of 2017.

The project is a standard design battalion-sized Operational Readiness Training Complex, to include battalion headquarters, company operations, enlisted barracks, officer quarters, company storage sheds, and organizational vehicle parking. Soldiers will conduct weekend training at the center. Sustainable Design and Development was incorporated which included hot water generation from solar panels, energy efficient lighting, and roof designs to accommodate future photovoltaic solar panels. The barracks buildings achieved LEED Silver rating and the company operations and officer

quarters buildings achieved LEED Gold rating. The Louisville District managed the design, award and construction, and the Sacramento District provided daily construction oversight and management.

"The Project Delivery Team is excited about the opportunity to provide quality facilities to assist our Soldiers in fulfilling their training missions," said Sonia Suggs, project manager.



Emergency Operations

District employee praised for role in Mosul Dam Task Force



For the past six months Steve Zalis, Louisville District supervisor engineer, served overseas and played a critical role serving with the Mosul Dam Task Force. Steve assisted in overseeing and providing quality assurance for the construction of the base camp.

Todd Hornback, public affairs

A Louisville District supervisor engineer has received accolades for his service on the Mosul Dam Task Force where he served from September 19, 2016, to March 4, 2017.

Steve Zalis played a critical role serving with the Mosul Dam Task Force, referred to as MDTF, in support of Operation Inherent Resolve. He assisted in overseeing and providing quality assurance for the construction of the base camp and worked as the contracting officer representative on several additional contracts that gave the MDTF essential logistics and engineering expertise support.

"I was part of the initial team that went in," Zalis said. "There was five of us. We were the first wave of Corps folks to show up. I worked on the contract administration side of the house and performed various engineering duties to support the Mosul Dam mission."

Zalis, a mechanical engineer at the Olmsted Locks and Dam project, served several roles in his work for the task force including lead office engineer conducting housing complex quality assurance inspections, warehouse inventory control, point of contact for all maintenance issues for the MDTF office buildings and living quarters, and serving as the contracting officer's representative for Versar Contracts that included the Local National Services and Vehicle.

In an email, Mosul Dam Task Force Commander Michael J. Farrell wrote to Louisville District Commander Col. Christopher Beck to thank him for the outstanding support and service Zalis provided while on tour for the MDTF.

"He was instrumental in helping us stand up the task force, determine our mission, and reach full operational capability during some tumultuous and somewhat dangerous times," Farrell stated referring to Zalis. "Rest assured that he made significant contributions here, and represented the Louisville District with pride!"

"It was my fourth deployment and I knew what I was getting into," Zalis said. "We lived on a construction site. I know

on the news, my wife would say they reported we were in danger. I never felt in danger. We had incoming one time when we first got there."

He added, a majority of the fighting was in Mosul – approximately 25 miles away.

Mosul Dam became a focal point of international news when a U.S. Army Corps of Engineers report in 2006 called it "the most dangerous dam in the world" because of its propensity to erode.

The U.S. Embassy reported "Mosul Dam faces a serious and unprecedented risk of catastrophic failure with little warning...A catastrophic breach of Iraq's Mosul Dam would result in several loss of life, mass population displacement, and destruction of the majority of the infrastructure within the path of the projected floodwave."

A United States-led coalition is determining the likelihood the hydroelectric dam could collapse and has developed a contingency plan alongside the Iraqi government. The dam was built in the early 1980s and is made largely of earth and situated on soft mineral foundations. If it fails, it could send a 65-foot tidal wave through the region with waters reaching Baghdad approximately 222 miles from the dam.

"Like all deployments, it was a great experience," Zalis said. "Working with the Corps of Engineers you get opportunities you don't get at other places."



(Left to right) Jimmy Waddle, Steve Zalis and Mike Brown pose with their Christmas cards sent from home with Mosul Dam in the background.

FIIOLO COULTESY OF 3

District steps up for disaster duty in Baton Rouge

Patty Germano, construction division

In August 2016, record rainfall saturated Southeast Louisiana. Some areas of the region experienced more than two feet of rain and 11 river gages saw record crests. The president declared a major disaster for Louisiana two days later. The Memphis District Emergency Operations Center, received a mission assignment to FEMA Region VI's Regional Response Coordination Center.

Six Louisville District employees stepped up to deploy in support of the disaster response, which included a total of 11 assignments in support of the overarching temporary housing mission.

Patty Germano, construction division, was the ENGLink Specialist for the Regional Activation of the Incident Management Assistance Team at FEMA's Joint Field Office in Baton Rouge for approximately two months. Sgt. 1st Class Portia Hall, contracting division, served at the Joint Field Office for two months and one month at the Memphis District.

A debris mission assignment was issued that required a USACE Debris Technical Assistance team to provide oversight of state and local entities' debris operations, provide progress reports, and offer other information required by FEMA. Eric Cheng, engineering division, served as the debris subject matter expert for this team for 13 days. By the end of the mission on Nov. 4, FEMA reported that there had been 3.7 million cubic yards of debris removed.

Additionally, the Infrastructure
Assessment Recovery Support Function
team was called in to provide subjectmatter expertise for the collection of
contractor assessment data and upward
reporting to address infrastructure



Debris pile in Baton Rouge, Louisiana following the August 2016 flooding that ravaged the area.

and mitigation solutions, impacts, and opportunities for sustainability. Once the mission declined, many of the engineers transitioned into the Multi-Family Lease and Repair assignment to conduct dwelling assessments and cost estimates for required repairs on components of the units to make them habitable and obtain a Use and Occupancy permit for housing survivor applicants. The mission was completed in November and resulted in the assessment of 29 multi-unit properties.

There were two primary mission assignments that fed into the Temporary Housing mission. Residents whose homes were damaged in the flooding signed up with FEMA for temporary housing, for approximately 18 months, to give them time to make repairs on their homes. Once approved, site inspections were completed by contractors or government employee inspectors. If feasible, a manufactured housing unit was hauled to their property, installed on site, and inspected prior to occupancy. If sites were found infeasible, homeowners had alternative options. They

could move into a manufactured home in a pre-constructed mobile home park or on a USACE-constructed group housing site.

The highest concentration of affected residents was in the East Baton Rouge, Livingston, Tangipahoa, and Ascension areas. The group housing mission began with inspections on 50 sites. Only one site—Victoria, in East Baton Rouge Parish—made it to construction. The Victoria site has a capacity of—and currently houses—30 manufactured homes. FEMA began licensing occupants in January.

Duane Pfouts, engineering division, and Mark Beville, construction division were quality assurance inspectors assigned to the Haul and Install mission for a month each. USACE was tasked with taking FEMA issued work orders and assigning sites to their contractors. The contractors hauled corresponding manufactured homes from the staging area to applicants' properties where they would block and skirt the unit and install the proper utilities. USACE inspectors would then go through the unit and point out any items the contractor needed to repair or replace. Once the manufactured home was found satisfactory, a USACE assigned FEMA technical monitor would inspect the site to ensure the unit was up to FEMA's standards. Then the unit was approved as ready for occupancy, and FEMA began licensing in survivors. Andrew Fleming, emergency operations, was an inspector on this team for approximately a month.

By the end of the mission in January, FEMA had licensed-in 3,919 survivor applicants into 3,988 manufactured homes and 1,652 units were ready for occupancy.



Deployees (left to right) Patty Germano, Mark Beville, Eric Cheng and Andrew Fleming were honored by Lt. Col. Robert Newbauer during the district's award ceremony March 7 with a certificate of appreciation for their efforts.

Employee participates in grueling Bataan Memorial Death March

Todd Hornback, public affairs

A Louisville District engineering technician participated in the 75th anniversary of the Bataan Death March—a marathon which organizers refer to as "26 miles of high desert, 26 miles of pure perseverance."

Engineering Division's Mona Waldeck completed the 26.2 miles in just over seven hours—an accomplishment which took her through the New Mexico desert heat and sand and a one-mile sand pit at the course's 22-mile marker. But according to Waldeck, her mission was to honor the fallen and thank the prisoners of war attending the event.

"I'm a veteran," Waldeck said. "It is in recognition of veterans—to remember. Unfortunately, so many seem to forget."

The march, held annually since 1990, memorializes the approximately 10,000 Americans and 58,000 Filipino servicemembers who defended the Philippines in World War II. In a battle which has been referred to as one of the worst atrocities in the war, the United States surrendered the Bataan Peninsula April 9, 1942. Japanese military forced these servicemembers to walk more than 65 miles to a prison camp through the Bataan Peninsula jungle without food or water.

The annual Bataan Memorial Death March commemoration, attended by many of the survivors of the march along with thousands of supporters from around the world, is held at White Sands Missile Range, New Mexico. The 75th anniversary event brought a recordbreaking 7,200 participants—capping out the number of event participants.

"I met six of the POW survivors," Waldeck said in reference to the less than 50 remaining POWs. "I shook their hands. You just want to meet them and let them know how much you appreciate what they did," said Waldeck.

One of the prisoners of war survivors was Ben Skardon, a 99-year-old veteran who did the first eight and a half miles of the race. When Skardon saw Waldeck wearing a Combat Veteran Motorcycle Association (CVMA) t-shirt, Waldeck said, "He asked me, 'Are you a veteran?' When I said, yes, he said, 'I don't want to shake your hand. I want to give you a hug,' and he got out of his seat and hugged me."

In addition to attending speaker sessions from POWs, Waldeck met a fellow CVMA member from New York who ran the marathon in honor of a friend's grandfather. The man carried the veteran's POW armband, the service member's service photo and two of his medals of honor as a way to memorialize the veteran.

As another way to pay tribute, Waldeck requested a Louisville District coin from Louisville District Commander Col. Christopher Beck. She placed the district coin and a CVMA coin into the unit coin drop off. The 75th anniversary coin display will be permanently exhibited at the White Sands Missile Range Museum.

"I'm proud of Mona for participating in the event and adding the Louisville District coin to the Bataan Museum



Mona Waldeck, engineering division, participated in the Bataan Memorial Death March marathon and had the opportunity to meet six of the POW survivors from World War II. display," Col. Beck said. "Her strength in completing this grueling marathon reflects the strong traditions we have in the district and a reminder to honor those who have given so much for our country."

Waldeck has worked in the Louisville District since 2001. She served 12 years active duty including Germany and Forts Bliss, Bragg, and Huachuca. She served in Saudi Arabia and Honduras. She and husband David Waldeck, a retired Navy veteran and Louisville District construction representative at Fort Knox, also spent a year together in Afghanistan with the Corps in 2011.

"It was an absolute honor to participate in this event," Waldeck said. Commenting on the Bataan Death March survivors she added, "We do it for them."



The 75th Anniversary event saw a record-breaking 7,200 participants for the marathon held at White Sands Missile Range, New Mexico.



Wounded Warriors complete the rigorous 26.2 mile marathon.