

KANSAS CITY DISTRICT'S NEWS MAGAZINE

# HEARTLAND ENGINEER



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JULY - SEPTEMBER 2014



# BUILDING STRONG RELATIONSHIPS

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Diana McCoy, EOC/Deployment Coordinator  
Photo by Amy Phillips

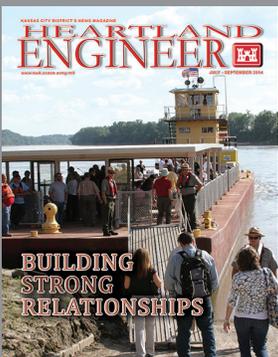
## Employee Profile

Diana McCoy began her federal career in the Kansas City District in 2004 as a Public Affairs intern. She has dedicated 10 years with the Corps in the Public Affairs office.

McCoy's tenure with Public Affairs has proven to be very valuable in shaping and improving the district's overall program.

Although McCoy is no longer a member of the Public Affairs team, she continues to serve the Kansas City District. She recently accepted a position with the Emergency Operations Center as the EOC/Deployment Coordinator.

The Public Affairs team would like to thank Diana for her dedicated service as a Public Affairs Specialist and wish her all the best in her new position as the district's Deployment Coordinator.



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### ON THE COVER:

Stakeholders and Corps employees board the Motor Vessel Jumbo for the Aug. 12 Missouri River Stakeholder Meeting and Inspection Tour. Photo by Amy Phillips.

As we head into the twilight of the fiscal year ending 2014, I'd like to extend my sincere appreciation for all the efforts put forth by the district to successfully close out yet another impressive year.

Since the last edition of the Heartland Engineer, our district has been exceptionally busy. One significant milestone was the groundbreaking to launch the construction of hangars and support facilities for the KC-46A at McConnell Air Force Base. The event was well publicized and well-received by members of congress, the governor and numerous military officials. It was a proud moment for the district and I'm confident we'll deliver the finest quality facilities to the Air Force on time.

Congratulations to Team Corps on a superb showing in this year's annual Corporate Challenge. We finished in 3rd place out of 24 teams in Division C. This year again, we proved our competitive spirit and sportsmanship throughout the 200 companies and over 25,000 individuals that competed this year. Thanks to everyone who participated in, volunteered, or helped organize the events. Your interest and support of Team Corps is greatly appreciated and you helped reinforce our positive image and reputation within the greater Kansas City community. I'm certain we'll do just as well, if not better next year.

I'd like to recognize and thank Mr. Michael Watkins for his 25 years of oversight and management of this event. The district has gained recurring positive recognition from Mike's tireless efforts.

That said, I'd like to welcome our new "skipper" or Competition Coordinator, Mr. Ben Davis and thank him as he takes the lead for future Corporate Challenge competitions.

Although the district hasn't been involved so far this year with any major disasters, I'm pleased with the efforts of all to ensure we don't become complacent. These efforts were showcased by the Spring Missouri River Flood Exercise, the recent Continuity of Operations exercise, and most recently with our participation in the U.S. Northern Command's Defense Security Cooperation Agency sessions. These exercises and scenarios are realistic, and test the operational ability and readiness of the district to react as seamlessly as possible to either a natural or man-made disaster.

The district continues to improve its communication and relationship efforts with our many stakeholders. A great example of such an effort is the Missouri River Stakeholder Meeting and Inspection Tour the District hosted in August. The event was well attended and well received by many of our stakeholders. This event provided a great opportunity for relevant dialogue regarding status of ongoing projects and initiatives and stakeholder concerns on the Missouri River. Thanks to the team who made this event possible and such a success.

As we near the end of the FY 14, I remind you to be cognizant of SAFETY in all your work and non-work related endeavors. Nothing is more critical to our mission than the emphasis we place on the safety of our employees.

Again, thanks for your continued efforts to close out a very successful 2014. Your successes continue to provide a greater quality of life to those we serve as we build better future for the Heartland.



COL Andrew Sexton

A handwritten signature in black ink that reads "Andrew Sexton". The signature is written in a cursive, flowing style.



Officials prepare to break ground at the site of the new 22nd Air Refueling Wing for the KC-46A Pegasus. Pictured from left to right: 931st Air Refueling Group commander, Col. Mark Larson, USACE Kansas City District commander, Col. Andrew D. Sexton, Mayor of Wichita, Mayor Carl Brewer, U.S. Senator Pat Roberts, Kansas Governor Sam Brownback, Air Mobility Command commander, Gen. Darren W. McDew, 22nd Air Refueling Wing commander, Col. Joel Jackson, and U.S. Senator Jerry Moran. Photo by Amy L. Phillips

*By Airman 1st Class John Linzmeier, 22nd Air Refueling Wing Public Affairs*

Shovels overturned the first piles of dirt during a groundbreaking ceremony for the new KC-46A Pegasus at McConnell Air Force Base. The ceremony symbolized significant progress in the KC-46A program and that construction in preparation for the Pegasus' arrival has officially started.

The construction includes a two-bay corrosion control and fuel cell hangar, a three-bay general maintenance hangar, a one-bay general maintenance hangar and an aircraft parking apron.

Gen. Darren McDew, Air Mobility Command commander; Brig. Gen. John Flournoy, Jr., 4th Air Force commander; Col. Joel Jackson, 22nd Air Refueling Wing commander, Col. Mark S. Larson, 931st Air Refueling Group commander, Col. Andrew Sexton, Kansas City District commander, and other distinguished visitors had the honor of shoveling the first clumps of earth.

While the official party broke ground on the project, McDew acknowledged that the mission is really carried out by the McConnell community.

"Air Refueling is vital to rapid global mobility - the AMC Airmen that maintain, operate and support our tanker fleet put the "global" in global reach, vigilance and power. The KC-46A Pegasus will ensure we can continue to provide our nation with this amazing capability. The success of our global air mobility enterprise depends on strong leaders, and this ceremony is about the men and women of McConnell boldly forging the future of our air refueling operations," said McDew. "I have faith and trust they will exceed my expectations."

McConnell AFB will be the first active duty-led main operating base for the new KC-46A, which is part of a three phase effort to recapitalize the Air Force's tanker fleet. Jackson reflected on the current tanker's history.

"Since 1971, McConnell has been the Air Force's premier tanker base flying the venerable KC-135," said Jackson. "In 1995, we became one of three Air Force

super tanker wings, and would eventually become the largest tanker base in the Air Force."

The establishment of McConnell as the first main operating base also means a new mission on the horizon for the Air Force Reserve 931st Air Refueling Group.

"It's exciting to know that our reservists will be some of the first Airmen to fly and maintain the KC-46," said Larson. "For the last 19 years, the 931st Air Refueling Group has worked side-by-side with our active-duty counterparts to achieve tremendous success in conducting KC-135 operations around the globe. As we move forward to the KC-46, I know our Total Force team will not only succeed, but excel in this new and exciting mission."

McConnell will be the first base to bed down the Pegasus, expected in 2016. It has a larger refueling capacity, improved efficiency and increased capabilities for cargo and aeromedical evacuation.

The new tanker will help to expand the Air Force's war fighting capabilities supporting the Navy, Army, Marine Corps as well as allied nation coalition forces and even other KC-46As.

Along with the F-35A Joint Strike Fighter and the Long Range Bomber, development of the KC-46A is amongst the Air Force's top three acquisition priorities.

While the Air Force is preparing a new generation of tankers, McConnell's mission will stay the same - to deliver war-fighting capability today and tomorrow.

"Be it the past or the future, our mission success has, and will always, depend on the men and women of Team McConnell," said Jackson. "We are prepared and honored as a Total Force Team to forge the future of aerial refueling with the arrival of the KC-46A fleet."

The Kansas City District is the agency that will oversee the construction of the more than \$260 million project over the next four years.

"This is the largest program that the Kansas City District has ever had at McConnell," said Ben Davis, program manager.

# Managing for dam safety

By Amy Phillips

The Kansas City District maintains and operates 18 multipurpose reservoirs predominately for flood control and each year they are responsible for the inspection of the structures.

Since March, the district has been in the process of inspecting the operational condition of all of the dams in the district. The inspection team assesses the status of the embankment, intake tower, operation of the gates and auxiliary equipment within the tower, and any other structures and features involved with the dam. They also inspect the emergency spillway and emergency rock stockpiles.

Susan Abbott is the annual dam safety inspection coordinator in Operations Division's Maintenance Engineering Section and part of the four person team that takes part in the annual inspections. That team is made up of a mechanical engineer, electrical engineer, geotechnical engineer and Abbott who is a civil engineer. The inspection is typically completed in one day.

"Each lake has an assigned geotechnical and structural engineer that is the go to expert for that lake," said Abbott.

All the dams in the Kansas City District are considered High Hazard Dams based on the damages or consequences that would occur if the dam failed. The district is mandated under Engineering Regulation 1110-2-1156 to conduct annual inspections.

Annual inspections occur every year except when the lake is scheduled for a periodic inspection. Annual inspections monitor the performance of the dam and allow

observation of any changes that may have occurred since the last inspection. It's also an opportunity to recommend additional dam safety related operational and maintenance needs and provides valuable information used to update the current status of previous dam safety inspection recommendations.

The periodic inspections are scheduled for every five years. The team for the periodic inspection is much larger and includes other disciplines such as a geologist, structural engineer, a hydrologist, a dam safety representative from the District's Engineering Division and a representative from the Northwestern Division Office. The inspections usually last for two days.

"The periodic inspection is a more, in-depth investigation and takes a closer look at the instrumentation that is monitoring the condition of the lake," said Abbott. It is evaluated to ensure structural stability, safety, and operational adequacy.

The next level would be the periodic assessment which is conducted every 10 years. Periodic assessments are done in conjunction with periodic inspections as a way to assess, classify and manage the risks associated with U.S. Army Corps of Engineers dams.

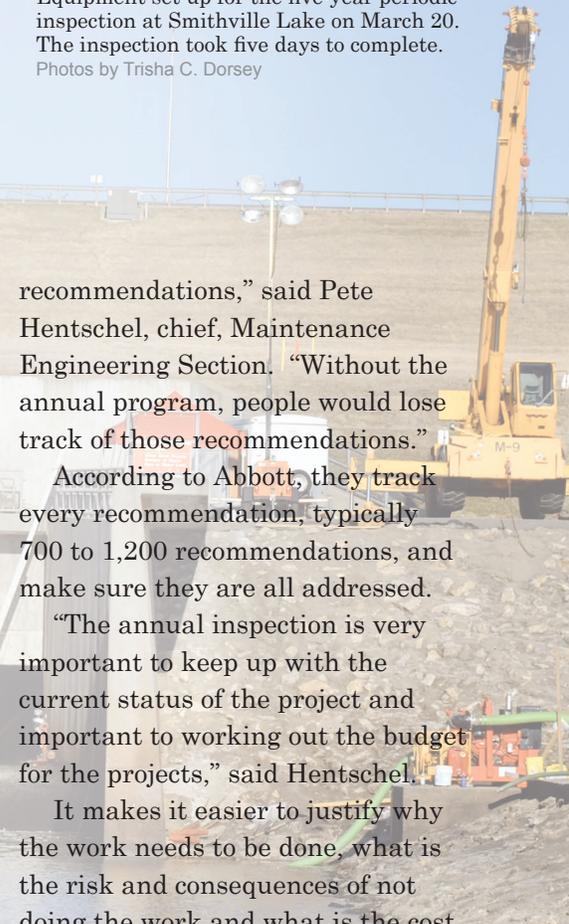
"When we do the periodic assessment, we sequester the team and go through the design and construction documents," said Abbott. "We are looking for anything that could indicate vulnerabilities and associated risks for the dam."

"The annual inspection makes sure that we are tracking all of our periodic inspection and assessment



Top: Park manager, Derek Dorsey, pauses for a photo as a five-year periodic inspection is underway at Smithville Lake. Staff rotated 24-hour shifts for five days until the inspection was completed late on March 20, 2014.

Equipment set up for the five-year periodic inspection at Smithville Lake on March 20. The inspection took five days to complete. Photos by Trisha C. Dorsey



recommendations," said Pete Hentschel, chief, Maintenance Engineering Section. "Without the annual program, people would lose track of those recommendations."

According to Abbott, they track every recommendation, typically 700 to 1,200 recommendations, and make sure they are all addressed.

"The annual inspection is very important to keep up with the current status of the project and important to working out the budget for the projects," said Hentschel.

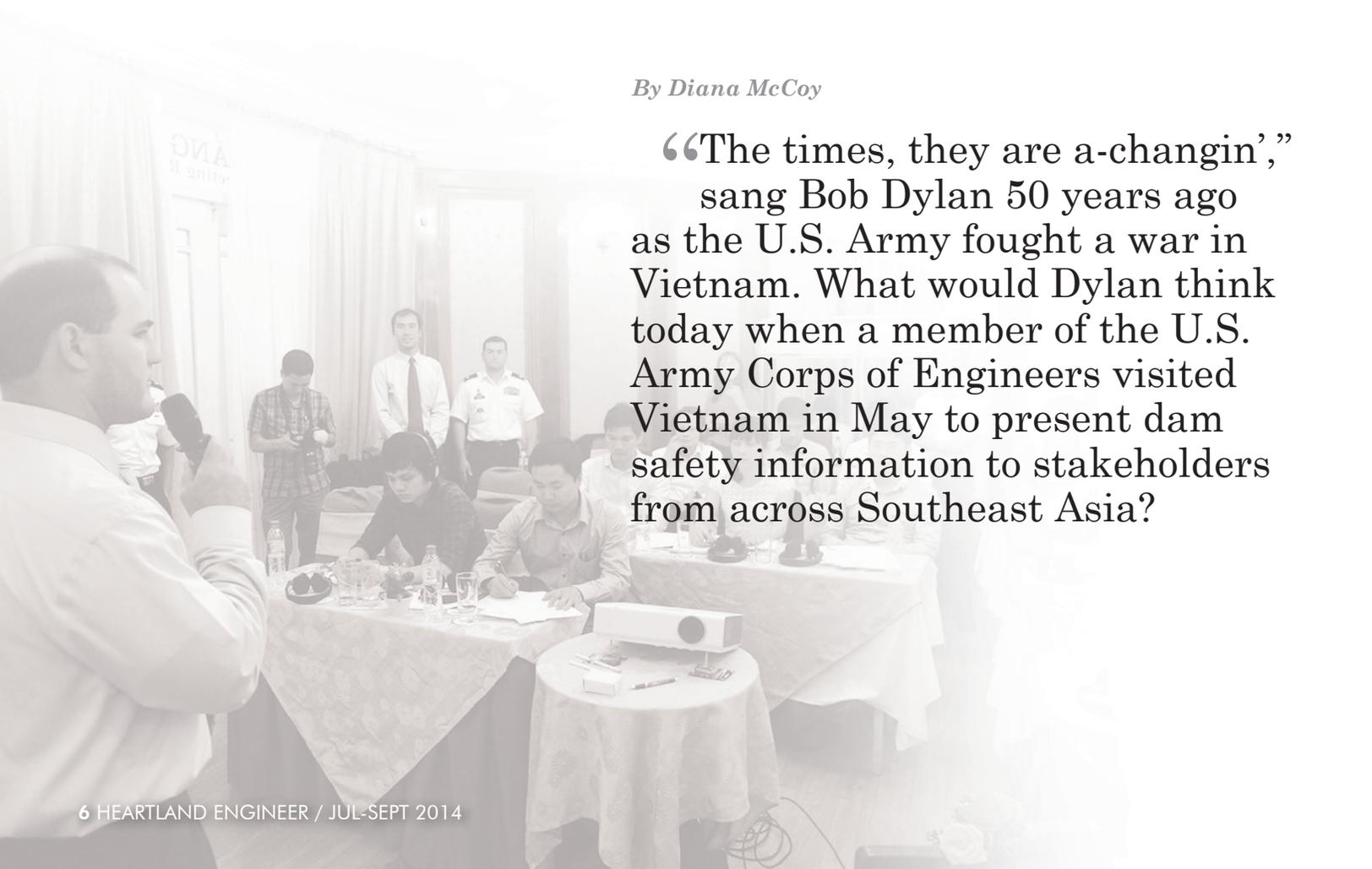
It makes it easier to justify why the work needs to be done, what is the risk and consequences of not doing the work and what is the cost.



# District supports Pacific Command in Southeast Asia

*By Diana McCoy*

“The times, they are a-changin’,” sang Bob Dylan 50 years ago as the U.S. Army fought a war in Vietnam. What would Dylan think today when a member of the U.S. Army Corps of Engineers visited Vietnam in May to present dam safety information to stakeholders from across Southeast Asia?



The USACE Northwestern Division's Dam Safety Production Center asked Jacob Owen, chief of Kansas City District's Geotechnical Branch, to support the U.S. Pacific Command as part of the Lower Mekong River Initiative. Owen addressed the Mekong River Commission, with members from Cambodia, Laos, Thailand and Vietnam. The Dam Safety II Workshop was held May 5-8 in Ho Chi Minh City (formerly Saigon), Vietnam.

"I thought it was a great engagement," Owen said. "The Mekong River Commission is really trying to provide smart approaches to developing hydropower."

Hydropower is a developing resource in Southeast Asia, and Owen said that they have a growing appetite for power.

"We provided approximately 50 attendees with insight into how USACE approaches dam safety, and provided ways for them to consider the potential risks and consequences of dams, and also the potential life safety issues," Owen said. "Another aspect for them to consider, for example, is if Laos builds a dam in one area, how will it affect Vietnam in another area?"

Owen said they spent three days of the four-day workshop in a classroom, and one day touring the Tri An Hydropower Dam. He was accompanied by other USACE personnel -- David Paul, Risk Management Center; Robert Taylor, Great Lakes and Ohio River Division; and Cary Talbot, Engineer Research and Development Center.

"It was a real pleasure to work with these gentlemen. They are true professionals," Owen said.

In preparation for the event, Owen and the others put together technical sessions for classroom instruction on dam safety, including a mock periodic assessment.

This year's event followed the Dam Safety I Workshop in 2013 in Thailand. The objectives of this workshop included promoting Department of State Lower Mekong initiatives; building partner nation water security capacity development; improving coordination between Lower Mekong countries; and aiding the development of emergency response plans.

"Overall, the Mekong River Commission and the Mekong National Water Committees expressed an interest in focused hydropower training, technical reviews of regional dams, environmental considerations and conducting site visits to U.S. hydropower infrastructure," Owen said.

The importance of risk-informed dam safety in the region is paramount to life safety and economic success, according to Owen. The Vietnamese have a limited notification system to inform people in the event of a dam failure or a large release. Economic damages could also occur with the loss of commerce from a dam failure or damage to infrastructure.

A second workshop, Flood Modeling & Early Warning Capacity Development Phase II, took place May 12-14 in Hanoi, Vietnam. Owens and Talbot were asked to present at that workshop as well.

The second workshop was in support of the United States Agency for International Development and the

Pacific Disaster Center for the government of Vietnam to promote partner national capacity development in water security. Sixteen representatives attended from the Vietnam Ministry of Agriculture and Rural Development, the Vietnam Disaster Management Center

and other government stakeholders.

Owen said the consensus from participants was that Vietnam needs a national dam safety program and that future dam safety training is desired. He said the chances are very good that USACE will hold another engagement with the Mekong River Commission, and there have been discussions about potentially bringing some of those members to the U.S. to visit a USACE dam project.

"The workshop in Hanoi was very focused on establishing sound fundamental dam safety principles," Owen said. "Vietnam has some very good approaches to dam safety. They are committed to improving their dam safety program and should be acknowledged for their efforts. Relationships were established both with the Pacific Disaster Center and the government of Vietnam, making future engagements possible."

*(Jacob Owen, chief of Geotechnical Branch, Kansas City District, contributed to this article.)*



Top left: Participants of the Dam Safety II Workshop pose for a class photo in Ho Chi Minh City, Vietnam. This workshop was a segue to the 2013 workshop in Thailand. Photo provided

Bottom left: Jacob W. Owen makes closing remarks to students and representatives from the U.S. Embassy and Pacific Disaster Center at the Flood Modeling & Early Warning Capacity Development Phase II Workshop May 14. Photo by Dr. Nguyen Huu Phuc

Above: Jacob W. Owen (far left), participates at the Dam Safety II Workshop May 5 in Ho Chi Minh City, Vietnam. The workshop was a multinational effort with the Mekong River Commission, consisting of members from Cambodia, Laos, Thailand and Vietnam.

Photo by Cary A. Talbot



Top left: Scott Rice conducts a live radio interview during the second inning of the Springfield Cardinals game promoting water safety information and key messages.

Top Right: Bobber the Water Safety Dog has a good time with some adoring fans before the game.

Bottom: Springfield Cardinal Mascot Louie and Bobber share a moment before the game along with Lea Deeds, Natural Resource Specialist with the Little Rock District and a Cardinal player.

# First Pitch of Many



Story and photos by David S. Kolarik

This July, Bobber the Water Safety dog delivered the first pitch in front of thousands of cheering baseball fans attending the Springfield Cardinals minor league baseball game in Springfield, Mo., yet that was but one pitch of many Bobber would share with Cardinal fans.

Since 2011, Bobber has been throwing out the first pitch with the Springfield Cardinals and pitching Corps water safety messages of the importance of personal floatation devices and boating safety and alcohol use through numerous mediums including outreach at the stadium, local radio interviews and public service announcements.

“The event was highly successful in that we reached around 4,000 people at the stadium tonight due to cooler than normal temperatures which made for a perfect evening,” said Scott Rice, a Natural Resource Specialist with the Kansas City District.

**“It’s a triumphant event for two reasons, we’re reaching people that come and recreate on our lakes, and because our target audience is essentially 18-60 yr old males.”**

Since 2005, the Kansas City District has endured 86 drownings throughout our 18 lake project offices with 10 of those occurring in 2014. Of those, 82 victims were male with only four being female.

That’s why the Corps targets their messages to 18-60 year old males.

The district works tirelessly in their efforts to prevent these occurrences and actively pursues relevant venues to spread its water safety messages.

The District operations team has a project delivery team in place to guide the water safety program, the PDT is comprised of Natural Resource Specialists. The Specialists research viable methods of relaying important water safety messages and develop support materials for the field to distribute at appropriate venues. They produce graphics for banners and other promotional items to include Frisbees, cups, baseballs and other items all branded with water safety messages.

The idea to work with the Springfield Cardinals minor league team is natural since in the past the district has partnered successfully with the Kansas City T-Bones minor league team.

According to Rice, Springfield, Mo., is a logical city to promote our water safety messages both because of its size and vicinity to numerous lakes in Southwest Missouri. He stated that in general folks really utilize the lakes in that region and reiterated the importance of sharing our water safety messages.

The Kansas City District partners with other organizations during these events such as the Safe Kids Organization and the Brian and Nathan Keese Water Safety Organization.

“The Safe Kids Organization based in Springfield, Mo., is a great partner in providing us opportunities and venues to share

our water safety information to the public.” said Rod Hendricks, Stockton Operations Project manager.

He added that The Brian and Nathan Keese Water Safety Organization has also helped in supporting our life jacket loaner boards located on several Corps lake projects and other water safety outreach efforts.

Rice said that the Springfield Cardinals have been outstanding partners over the last four years as they’ve been very flexible, extremely accommodating and very personable. The staff always goes the extra mile to ensure success.

“Here at Hammons Field, nothing is more important than the safety of our fans! That is why we have teamed up with the U.S. Army Corps of Engineers to promote water safety to all of our Cardinals fans for the past four years! We know Cardinal fans love the lakes and we offer instruction and tips to make sure they are safe. Some of the ways we pass along this safety information is through T.V., radio, Cardinals Yearbook, giveaway items at the ballpark and even having Bobber; the Water Safety Dog, throw out the first pitch! It is a special event that the Cardinals as well as our fans look forward to each and every year!,” said Scott Bailes, a former Major League pitcher and current Manager of Market Development for the Springfield Cardinals.

The Table Rock, Stockton, Pomme De Terre and Truman lake projects are exceptionally supportive of this event as they continually provide the required staff and resources needed to ensure success.

# Digging up the past

By Amy Phillips

The Kansas City District is involved in several different functions to include, civil works, environmental and military construction but who would think that we are involved in archeological excavations also.

In June, the Kansas City District was involved in a limited field school in partnership with University of Missouri – Kansas City to take part in an archeological excavation of an area at Smithville Lake in Smith Fork Park to explore a prehistoric house site that was first discovered in 2009.

The site, which is approximately 1,000 years-old, was originally recorded as an archeological site in the 1970s but wasn't explored in great detail until 2009 and 2010 when the city of Smithville was exploring sites to put a soccer field.

“With our due diligence under the National Historic Preservation Act, we are required to determine if an archeological site or historic structure located on federal land or impacted by a federal funded or permitted project is eligible for inclusion on the National Register of Historic Places,” said Tim Meade, environmental resources specialist.

The Corps provides stewardship for these sites located on its lands by protecting them from looting or destructive activity. If protection is unavoidable the Corps mitigates the destruction of the site. In the case of archeological sites, that mitigation most often consists of excavating the site to retrieve the information that would be lost. Stewardship activities are coordinated with State Historic Preservation Officers and Native American Tribes prior to site disturbing activities.

The Corps is responsible for looking at sites at our lakes before any development can take place to make

sure that historic sites will not be disturbed during a project.

“We do this for all of our lake projects, state parks on Corps owned land, leased land, Corps land, agricultural leased property, stream bank erosion projects and any other project to see if it has the possibility to impact a historic site,” said Meade.

According to Meade, that can be as simple as just reviewing records or as complex as going to the site and excavating, which is rare.

For the Smithville Lake site, they wanted to explore more because it is from a cultural phase in time that not much is known about within the Kansas City area.

“Many of these sites were destroyed during the development of North Kansas City and the Platte County area. This was a very small, localized area and it was intact with historical implications and that is why it got the attention of researchers,” said Meade.

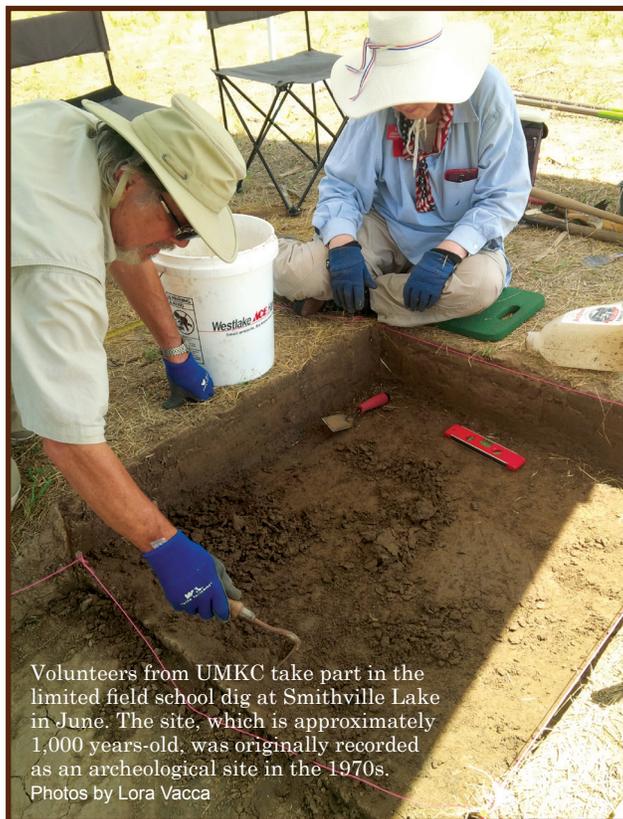
The Steed-Kisker culture was a part of the larger Central Plains tradition of prehistoric people who occupied the Great Plains region, according to Wikipedia. This was also

known as the Mound Builder Period or Mississippian Culture.

“We wanted to see if the site, which is located in an agricultural field had been destroyed,” said Meade. “We did some limited excavation, shovel testing, and found some items of archeological significance that were intact.”

Meade said that the material being intact is a criteria for the national register, the other factor is that it is an important find.

“This particular site was threatened by future recreation development,” Meade said.



Volunteers from UMKC take part in the limited field school dig at Smithville Lake in June. The site, which is approximately 1,000 years-old, was originally recorded as an archeological site in the 1970s.  
Photos by Lora Vacca

Tim Meade, Environmental Resources Specialist, and Phillip Alig, Cultural Resource intern, participate in a limited field school archeological dig in partnership with the University of Missouri – Kansas City at a historic site in Smith Fork Park at Smithville Lake in June.



Another important archeological find within the district is at Tuttle Creek Lake in Manhattan, Kan.

The Corps has partnered with the University of Kansas for this dig and their Project Odyssey program which is a privately funded geo-archeological study which looks for early human sites across the U.S. and there is one of those sites at Tuttle Creek. The site there has been dated to be between 1,300 to 1,400 years old.

The Corps partnered with the university about five years ago and has found mammoth bones and other important artifacts that make this a very significant find.

“This site is very limited and with the significant artifacts, it is probably ice age time. The older an area is, the less we know about it,” said Meade.

These sites can provide researchers important information about climate changes and other important information about early cultures.

“From the information gathered, we know that the Smithville site ended with a drought and the people had to leave due to the drought which most likely lasted about 100 years,” said Meade.

Similar information was gathered from the Tuttle Creek site which would indicate that there was a warming period during the ice age.

“The site at Tuttle Creek is being studied because the

area is in danger of eroding away because it is on the bank and there has been land lost over the last 50 years and they wanted to get in there and get the information before it is lost,” said Meade.

There are times when the Corps funds some of the research and American Recovery and Reinvestment Act Funds were used in the 2009 exploration of the Tuttle Creek site and then the university wanted to keep the research going.

“They partnered to do a field school to continue to expand our knowledge of the site and get us more information so we could define the boundaries of the structure that we found,” said Meade.

In addition to digs at these sites, they also perform remote sensing at the sites in which the ground is penetrated with radar so that they can see possible site features without disturbing the site. The radar can show anomalies and possible cultural resource features of the area.

Meade’s office has about 70 to 100 projects every year in which they explore the possible impacts from a historical perspective for projects throughout the district.

At the lake sites alone, there are over 6,000 known sites.



Steve Fischer, former Missouri River Recovery Program senior program manager and Steve Iverson, chief, Planning, Programs and Project Management Division interact with members of the Clean Water Commission during a site visit of the Jameson Island Unit Shallow Water Habitat Restoration Project in June 2012.  
Photo by Amy Phillips

# Progressing with Shallow Water Habitat

*Submitted by the Missouri River Recovery Program Team*

Located on the U.S. Fish and Wildlife Service's Big Muddy National Fish and Wildlife Refuge, Jameson Island provides habitat for terrestrial and aquatic species and public access for hunting, fishing and wildlife observation. A recent project at the site increased the amount of aquatic habitat by about 30 percent, but most importantly allowed for the Corps to make improvements in stakeholder communication.

The Jameson Island Shallow Water Habitat Project is the culmination of efforts that began in 2006 when the Corps began construction of a chute to re-create habitat for the endangered pallid sturgeon and other native fish and wildlife species. The project was intended to help the Corps meet metrics established in the USFWS's Biological Opinion (amended in 2003). During the initial planning and construction of this project, local stakeholders expressed concerns about the project's potential effects on water quality. Additionally, a nearby levee district in Howard County expressed their concern that the project may adversely affect their levee.

The project was nearly 30 percent complete when construction was halted due to concerns from the Missouri Clean Water Commission regarding discharge of sediment from the project location. From that time, the Corps began to work on a new project which addressed the concerns of both the commission and the adjacent levee district. Through the development of the new project, the Corps adapted their site development plans, improved their public involvement process and initiated water quality monitoring to address the specific concerns of the stakeholders.

The Corps worked very closely with several agencies to address the concerns of the commission and to learn more about any potential impacts to water quality. Todd Gemeinhardt, a water quality program manager for the Kansas City District stated, "The Corps has initiated a comprehensive water quality monitoring effort which allowed us to better understand the water quality of the Missouri River. The results of the monitoring for the Jameson Island Shallow Water Habitat project site

were closely coordinated with the State of Missouri. Monitoring results identified that measured parameters have not exceeded the state of Missouri's water quality criteria for the protection of aquatic life during project construction."

Since the Corps halted construction in 2007, the original project has developed into some of the best aquatic habitat that exists on the lower Missouri River. The new project was designed to expand upon those features, while also addressing the concerns of the levee district. The Corps held several meetings with the levee district and the new project was designed to block the existing outlet, create a small backwater area, and extend the chute approximately a mile downstream. Shortly before the completion of construction, the Corps again met with members of the levee district to ensure that their concerns were addressed. The design team extensively consulted with the Missouri Department of Natural Resources to develop a project that was the least environmentally damaging to the Big Muddy National Fish and Wildlife Refuge, the most beneficial to the adjacent levee district and the least cost to the taxpayer.

"Our team worked with federal, state, private stakeholders and the local levee district to better understand their concerns with the project allowing us to answer and address their specific questions. In the end, we worked with the state to develop a project that meets our endangered species requirements while fully supporting all authorized purposes and was least environmentally damaging, provided the greatest benefits to the levee district and addressed and minimized the concerns regarding water quality," said April Fitzner, MRRP senior program manager.

The project was finally completed in July 2014. The Jameson Island chute allows natural riverine processes to restore some of the habitats that were lost including greater diversity in water depths and velocities, increased retention of woody debris and areas of erosion and deposition.

# Interns spend the summer on the Missouri River

Story and photo by Diana McCoy

The Missouri River Recovery Program is getting some extra help this summer from two interns who are assisting a district biologist with sturgeon sampling.

Anthony P. Civiello and Justin G. Bounds are working under the direction of Marcus L. Miller through the Pathways Internship Program, a special hiring initiative for the U.S. Army Corps of Engineers.

The Pathways program is for current students and replaces the Student Career Experience Program and the Student Temporary Employment Program. Participants are referred to as “interns” and must be enrolled in qualifying institutions, as determined by the Office of Personnel Management.

This summer marks Civiello’s third summer as an intern for the district. He is attending graduate school at Oklahoma State University for a master’s degree in fisheries and aquatic ecology. He holds a Bachelor of Science in Wildlife Conservation.

**“When I finish my degree, I would like to pursue a career as a fisheries biologist,” said Civiello. “I was inspired by my dad who works for the Missouri Department of Conservation.”**

Civiello said that being involved in the Pathways program as a biology student trainee has allowed him to get valuable hands-on field and lab experience.

“The knowledge and skills I take away from my work with USACE on the Missouri River Recovery Program will give me an advantage upon graduation when seeking a position as a fisheries biologist,” said Civiello.

Bounds finished a four-year enlistment in the Marine Corps and decided to take advantage of his Montgomery GI Bill by enrolling at the University of Central Missouri. He lives in Lexington, Mo., and is pursuing a biology degree. Bounds plans to continue at UCM for his master’s. Like Civiello, he also wants to become a fisheries biologist.

“This job helps me gain experience in the field of fisheries while I continue to pursue my degree,” said Bounds.

Civiello said he originally heard about the program through his dad, and Bounds discovered the program through John A. Skelton at the Missouri River Area Office. Opportunities for Pathways internships are announced on USAJOBS.gov, and their appointments are for one year.

The two are spending their summer trawling various stretches of the Missouri River sampling for age zero sturgeon and other native fishes. Collected sturgeon are taken for genetic testing to determine if they are pallids or the closely related shovelnose.

“Part of their job allows them to see some of the Corps’ restoration while working to help evaluate our efforts by monitoring the responses from sturgeon and other native fishes,” said Miller.

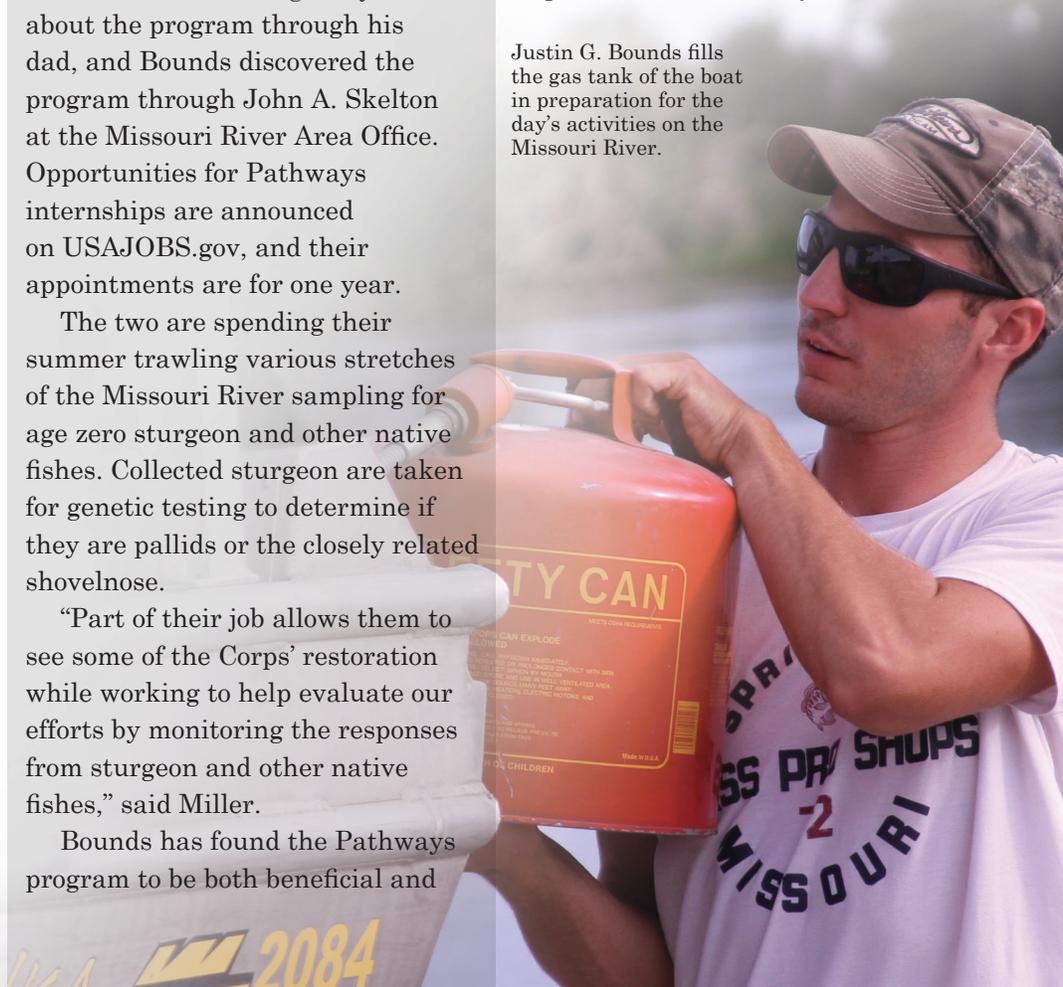
Bounds has found the Pathways program to be both beneficial and

fulfilling.

“I have enjoyed learning about lesser known aspects of the Missouri River as an ecosystem, which are largely overlooked from a recreational and sport fishing standpoint,” said Bounds. Also, the Pathways Internship Program has provided me with an opportunity to gain valuable experience with various fisheries sampling techniques and has allowed me to become more aware of current Missouri River issues while attending school.”

Felicia Harper, the district’s chief of Civilian Personnel Advisory Center, said the district currently has 61 personnel participating in the Pathways Internship Program. In addition, the district also has three Department of the Army interns.

Justin G. Bounds fills the gas tank of the boat in preparation for the day’s activities on the Missouri River.





Engineers with the U.S. Army Corps of Engineers, Kansas City District, Fort Riley office, work on a construction site July 9 at Marshall Army Airfield.



Engineers with the U.S. Army Corps of Engineers, Kansas City District, Fort Riley office, work on the roundabout in construction July 9 on Estes Road at Fort Riley.



Lead engineers with the U.S. Army Corps of Engineers, Kansas City District, Fort Riley office, discuss the progress of a motor pool still under construction July 9 at Marshall Army Airfield. Photos by Jessica Healey

# From the ground up U.S. Army Corps of Engineers

## keeps Fort Riley in good repair

*By Jessica Healey, 1st Inf. Div. Post*

From historical renovations to water line replacement and construction of the new hospital, the U.S. Army Corps of Engineers at Fort Riley seems to do it all.

“The Corps is huge and does everything from civil works projects, emergency response to maintenance of waterways and inland waterways and reservoirs. We are the Army’s construction agent, so the Corps handles all of the military’s construction, the congressionally appropriated projects,” said Anthony Cady, program manager forward, Kansas City District U.S. Army Corps of Engineers.

“And the majority of the Air Force’s as well, along with the Reserves,” added Mark Schuler, area engineer, Kansas City District U.S. Army Corps of Engineers.

The Corps of Engineers office at Fort Riley is made up of about 30 engineers who work closely with the Engineering Division in the Directorate of Public Works.

The organization also provides emergency management, civil works and environmental assistance.

The Corps also often collaborates with the Environmental Protection Agency to complete projects.

“The Corps is a national tool, not just within defense, but any other government agency. When something different needs to be built, quite often, the agency in need comes to the Corps of Engineers,” Schuler said.

The Kansas City District for the Corps, where the Fort Riley office is based, responds when floods or other natural disasters occur.

“The Corps immediately sent an emergency response team to Joplin, Mo., to start working with debris removal (after a catastrophic tornado hit in 2011.) They also did a lot of structural repairs,” Cady said.

The majority of the Corps’ projects at Fort Riley consist of sustainment, restoration and modernization.

These projects include historical renovations, water line replacements and electrical repairs.

The Corps is currently working on a few dozen projects at Fort Riley. Part of its function is to oversee contracts in addition to planning and executing.

FROM THE GROUND UP



An aerial photo of the new hospital being built by the U.S. Army Corps of Engineers, Kansas City District at Fort Riley. Courtesy Photo

“We are involved in so many things. Whatever the post needs, quite often, they can come to the Corps of Engineers and find that help,” said Schuler.

If the expertise needed isn’t available at Fort Riley, then the Corps will collaborate with its district office in Kansas City.

“Our district functions like any other architect, engineering and consultant firm, but we also do emergency management,” Schuler said.

The largest single project the Kansas City District has ever done is located on Fort Riley and is currently under construction.

The new hospital will be the largest project executed by the district when it is completed, and the Corps of Engineers at Fort Riley assisted with the process.

“I think that when you talk about the Corps and the entire district, you have to talk about the hospital,” Cady said.

The vast project is not only large in scale but also detailed and of high quality, all of which he said takes time to complete and ensure all standards are met.

“The quality that’s required for that facility will be there when the ribbon’s cut,” Cady added.

The hospital will boast many upgrades from the old one, including more rooms, better facilities and many green or energy efficient features.

“The hospital will service more people in a greater degree than any other facility the Corps has worked on at Fort Riley,” Schuler said.

Another recent project that had a large impact on the Fort Riley population was the replacement of water lines on Historic Main Post.

“One project I was most happy to work on was the water line replacements on main post,” Cady said. “We brought new water, new water pipes and meters into every single building – including housing and down on main post – and replaced all of the water mains. The magnitude and level of detail that project took and the improvement of the quality of basic drinking water on main post made it one of my most rewarding projects.”

The designs for the water line replacement project were completed in the Kansas City District office and after nearly two years the project is just about complete according to Cady.

Projects like the water lines often take a long time to complete and are intrusive to residents and workers at Fort Riley. However, Schuler explained the prolonged inconvenience is a result of the challenges maintenance work presents.

“It’s tougher to do maintenance projects than new construction as they often have to be done in phases,” he said.

Cady added it’s also tough when they have to dig into people’s yards, but it’s necessary and the outcome is worth it.

Less intrusive projects the Corps of Engineers have taken on in the interest of environmental preservation include assisting the EPA with a pilot program to build a membrane biological reactor and repurposing a portion of Camp Funston that was occupied by portable buildings.

“Those trailers on Camp Funston were no longer needed and expensive to maintain. There were 89 of them,” Cady said. “So now we are sending that area back to grassland.”

Without the Corps of Engineers, DPW would be left with the responsibility of many of their projects.

Based on the magnitude of what the Corps of Engineers actually does here, it’s unlikely that the post itself would have the manpower to get as much done without them, Cady said.

“The beauty of us being here is we work with and personally know all the primary stakeholders on the installation, and they know us,” he said. “We know what’s important to them; and we know their intent as we design and build infrastructure for the post.”

“There are no other organizations that can do all the different things the Corps of Engineers does,” Schuler added.

# Kansas City District Exercises Plan

By Amy Phillips

The U.S. Army Corps of Engineers' Emergency Management Branch conducted an exercise on July 30 to review the current Continuity of Operations Plan.

All essential personnel gathered at an undisclosed alternate location to test their ability to relocate and continue the core functions of the district during an emergency situation.

The COOP exercise, part of the Kansas City Regional Interagency COOP Exercise 2014, is an annual exercise led by the Federal Emergency Management Agency Region VII to provide Midwest federal agencies the opportunity to test their organizations' preparedness in the event that they cannot operate at their primary location.

The Emergency Operations Center for the Kansas City District participates in the Kansas City RICE every year but it is the first time in several years that the district as a whole has been able to be involved.

"Since it has been several years since the district has been able to test for the COOP at this level due to real world situations and other operation requirements, the focus of the exercise this year was on training and entailed an overview and familiarization of the COOP processes," said Jud Kneuvean, chief, Emergency Management.

The intent is to make sure that the district is prepared to configure the alternate location

and to be familiar with each of the requirements to get the alternate location up and running within the first 12 hours after an event, said Kneuvean.

The focus of this year's event was reconstitution which is the process by which agency personnel resume normal agency operations from the original or replacement primary operating facility.



Josh Marx, Natural Disaster program manager, explains the Regional Emergency Alert Notification Tool during the COOP Exercise on July 30. Photo by Jennie Wilson

"When you look at relocating to an alternate location, you will never have the 100 percent solution, said John Robinson, National Emergency Preparedness program manager. "You have to be able to pick up and do the best you can do with what you have."

Some of the threats that could result in the district relocating to continue operations could be as simple as an act of God such as a tornado or fire or could be as serious as a terrorist attack. Regardless of the situation, continuity planning is simply the good business practice of ensuring the execution of essential

functions through all circumstances, according to the plan.

During the exercise, the district reviewed the plan and tested some of the emergency operations systems such as WebEOC and the Regional Emergency Alert Notification Tool. A full accountability drill was conducted through the REACT system and there was a good response to the system.

"The good response is probably due to most people currently sitting at their desk," said Josh Marx, Natural Disaster program manager. But this is the first time that the system has been tested in this manner.

There were several good lessons learned during the exercise to include that a "Culture of Continuity," should be integrated into all aspects of the daily operations at the district.

"It is important to be familiar with the plan and it is important for supervisors to ensure that their employees are aware of the COOP plan and what will happen if there is ever an emergency within the district," said Robinson.

With this years' exercise being focused primarily on familiarization of processes, the district will now be able to test actual responses at future training events.

"This has been a good exercise," said Col. Andrew Sexton, district commander. "We need to do this again and ramp things up to further test capabilities and systems."

# Enjoying the Missouri River

Story and photos by Amy Phillips

The U.S. Army Corps of Engineers Kansas City District conducted a Missouri River Stakeholder Meeting and Inspection tour on August 12. The tour left from Glasgow, Mo., and concluded near Boonville, Mo.

Col. Andrew Sexton, district commander, welcomed the group of stakeholders, “Tonight, we will all get the opportunity to view Army Corps projects together along a short segment of the Missouri River.”

Steve Iverson, chief, Planning, Programs and Project Management Division, introduced the speakers that addressed the group. Those speaking to the group included: Chad Laune from Capital Sand; Richard Greenville from Kansas City Port Authority; Todd Sampsell from the Nature Conservancy; and Randy Asbury from the Coalition to Protect the Missouri River.

Sexton pointed out that the group would get the opportunity to look at some specific projects and review work completed for flood control, navigation and fish and wildlife enhancement.

One of those projects was the recently completed Jameson Island Shallow Water Habitat project.

Speakers talked about the relationship between them and the Corps and the importance of communication.

Asbury pointed out that the past relationships have been strained but it was time to move forward and improve communications, get to know each other and better educate ourselves on the process and rules that apply along the river.

Sexton shared that same commitment to build trust along the Missouri River.

“I have a philosophy that strong, solid relationships are built on TRUST,” said Sexton. “I pledge today, that while serving in my current capacity, all stakeholders can trust that I and the Kansas City District will do the ‘right’ thing for our stakeholders and the American people as it relates to our organizational mandates.”

Top: Jud Kneuvean, chief, Emergency Management, interacts with an attendee at the Missouri River Stakeholder Meeting held on Aug. 12.

Middle: Corps of Engineers Park Rangers check for attendees names on their list prior to boarding the barge for the stakeholder meeting on Aug. 12.

Bottom: Attendees listen to the speakers presentations aboard the Motor Vessel Jumbo with barge number 605 during the Aug. 12 Missouri River Stakeholder Meeting and Inspection Tour.



# Building on a Legacy

By Brad Slone

In 1940, chief engineer R. F. Bundy, along with over 2,800 construction workers, set out to construct 20 miles of new railroad through the rugged Ozark Mountains. This line, which would come to be known as the Fort Leonard Wood spur, was an addition to an existing line and was a critical asset to Fort Leonard Wood's contribution to the World War II effort.

Over 1.6 million cubic yards of materials were excavated. The route ended up requiring cuts over 3,000 feet long and 46 feet deep, with fills as long as 6,500 feet long and 60 feet deep. By working night and day, the project was completed in only six months- an engineering achievement impressive even by modern standards. The final cost was approximately \$2.5 million; even considering inflation and, this feat would be very difficult to equal today.

For decades those trestles have stood sound, performing their function just as the original builders intended. However, over the years urban development has completely changed the area's hydrology from when initial construction took place. Today, when there is a major rain event, it can change what is normally a dry creek bed into an eight foot deep torrent of water in a matter of hours. In fact, a similar event occurred in recent years, nearly washing away one trestle and forcing Fort Leonard Wood to spend thousands of dollars in repairs. It was determined that major upgrades to the railroad bridges were required.

Work on the first bridge began in June 2010, with two subsequent contracts in 2011 and 2012. The biggest issue faced by all three contracts has been the remote site access; with little more than trails available to bring in equipment and material to the jobsite. The contractors involved in the projects, L G Barcus and Lehman Construction Company, and the Corps of Engineers utilized several innovative methods to complete the projects. Not only was access difficult, but it also passed through ground belonging to private land owners. Every effort was made to accommodate the land owner's requests with minimal impact to their property.

Other obstacles included a ten inch high-pressure gas line that services the base's energy needs; it was located within the construction limits of the project. As the project progressed, mother nature impacted the work, and on several occasions workers had to deal with the flash flood events, which required quick removal of equipment and materials from the stream bed as well as one major flood event causing a lengthy delay in the project.

A final challenge, and the one we were always mindful of, was that our customer was unable to utilize the railroad while the bridge was out. This railroad spur is the only transportation means for some

A train crosses one of the bridges built at Fort Leonard Wood. The railroad spur is an important transportation means for some of the heavy military equipment to deploy from the installation. Photos provided

of the heavy military equipment that must be deployed from Fort Leonard Wood. With this in mind, the contract team worked many long days and numerous weekends to minimize the service outage.

Some may question the need to invest in a perceived outdated mode of transportation, however, in today's ever changing world environment, the readiness of our armed forces cannot be inhibited by an out of service structure. According to former FLW commanding general, Maj. Gen. David Quantock, "a base's ability to mobilize by rail is critical to its current and future missions and these current and planned projects are key enablers for the installation's success."

This has been a multi-phase endeavor. The first phase consisted of one bridge completed in 2011, second consisting of four bridges completed in 2012 and the third consisting of two bridges completed in 2013. There are plans in place for two more large bridges sometime in the future as funding becomes available.

There is no doubt that Bundy and his constructors set a very high bar for us to match. However, today's Corps of Engineers are ready to meet the challenge.

# AWARDS

DOD Value Engineering Achievement Award Winner  
Organization Category for Fiscal Year 2013  
Kansas City District, U.S. Army Corps of Engineers

The Kansas City District Value Engineering program became more robust from 2011 to 2013. It started with an approach to meet VE requirements emphasizing two critical points: 1) use “scalable” sized VE efforts matched to project scope or complexity, and 2) engage the designers during the VE process. The program took shape after an intensive outreach effort to describe the VE requirements, and NWK’s solution, throughout the District. A widely distributed program plan, national recognition for one of the Blue River projects, and a BQP as part of the ISO-9000 certification increased this momentum. VE was instilled further into the NWK design culture by cultivating a team of 12 Associate Value Specialists which enable NWK to perform more VE studies. NWK’s in-house VE capability coupled with three A-E contracts for VE services allowed NWK to assist other Corps districts, including the Middle East District.

The implementation delivered the VE message throughout NWK and allowed multiple opportunities to address any issues typically associated with VE head on. The expectation to implement VE and effectively apply the six step process has potentially saved NWK more than \$100 million.

Francke Walberg, former chief of geotechnical, was the 2014 recipient of the Gallery of Distinguished Employees Award, which was presented at the Organization Day on June 6 by Col. Andrew Sexton, district commander. Walberg was joined by his wife, Eleanor, and John Holm, chief, PM-C. Photo by Scott Robben.



Patricia Pitre was awarded the Gladys Davies Award for Administrative Excellence by Col. Andrew Sexton, district commander at the quarterly annual Organization Day on June 6. Also pictured is Stu Cook, chief, Operations Division. Photo by Scott Robben

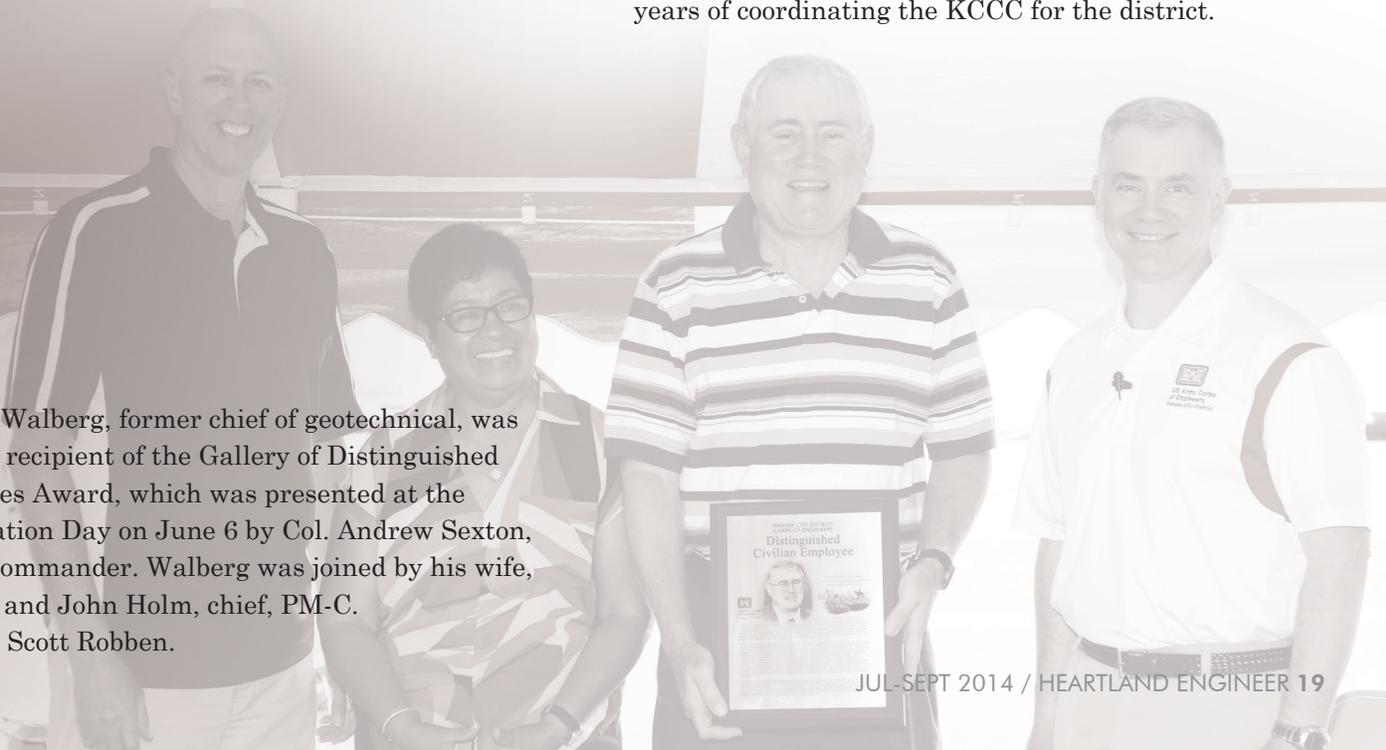
Gladys Davies Administrative Excellence Award –  
***Patricia Pitre***

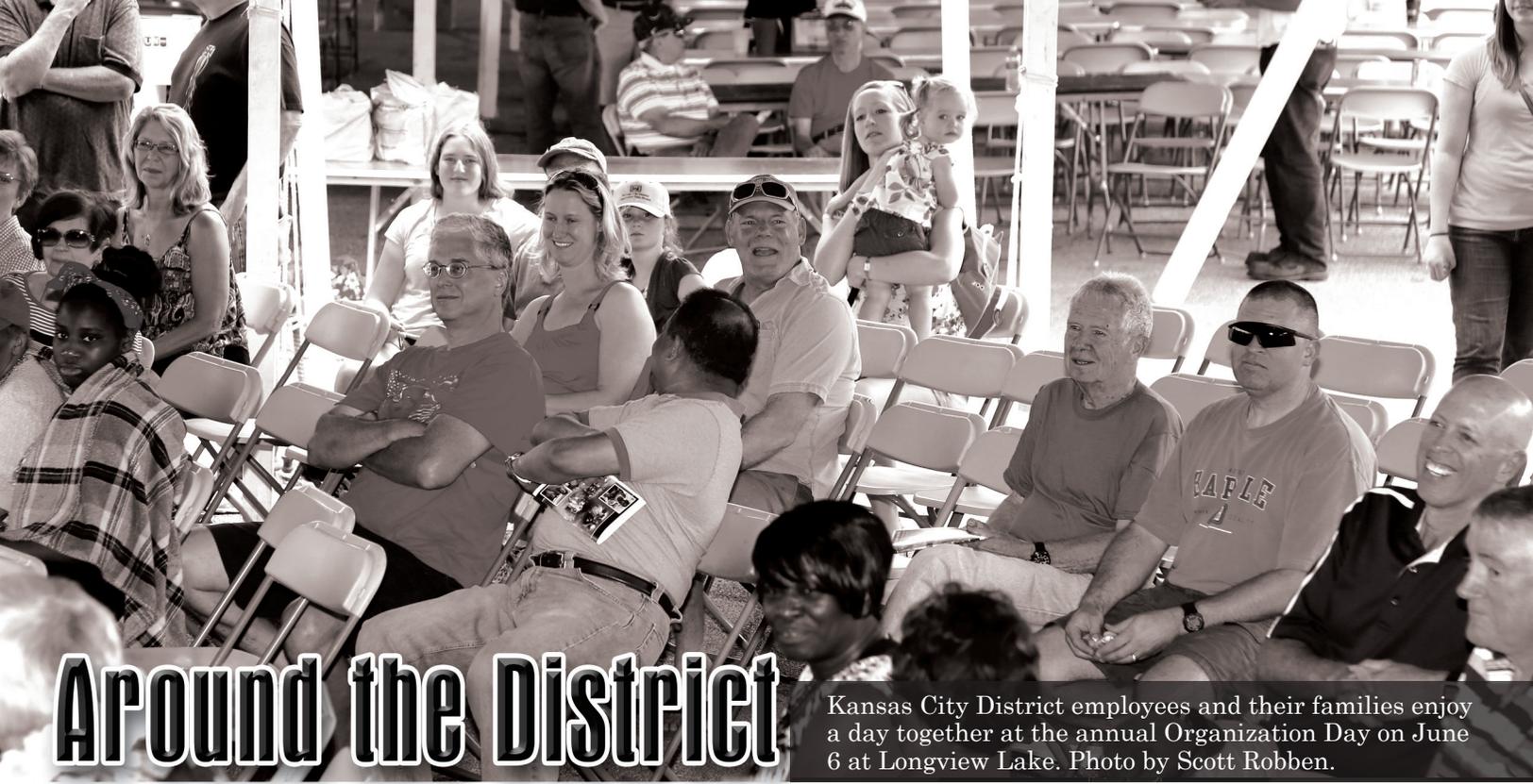
Distinguished Civilian Employee –  
***Francke Walberg***

NWD Silver Jackets - ***Brian Rast***

NWD CP-18 Journeyman of the Year - ***Susan Abbott***

Kansas City Corporate Challenge – **3rd Place Division C**  
A ceremony was held on July 29 and the district was presented with the award. Mike Watkins, KCCC Coordinator for the district, was recognized for his 25 years of coordinating the KCCC for the district.





# Around the District

Kansas City District employees and their families enjoy a day together at the annual Organization Day on June 6 at Longview Lake. Photo by Scott Robben.



The 2014 Regional Leadership Development Program graduation held on April 17 included two district employees, Michael Coates and Chance Bitner. Photo by Serena Baker.



Col. Andrew Sexton, district commander, talks to district employees about issues and concerns during a Town Hall Meeting on July 8. Photo by Diana McCoy.



The 2014 Leadership Development Program class graduated in a ceremony on Aug. 22. Congratulations to Brian Thompson, Jennifer Henggeler, Heather Hill, Robert Johnson, Laura Ferrante, Susan Windhorst, Anthony Hall and LDP Program Manager Jill Fraley. Photo by Jennie Wilson.