

Rock Island District's News Magazine

December 2013 - January 2014





Tower Times

of Engineers ®
Rock Island District

Island District Contents

December-January 2014



Bald eagles roost in a tree just downstream of Locks and Dam 15 in Rock Island, Ill., Jan. 9, 2014.
Photo by Hilary Markin

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Tower Times

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A message from....

Colonel Mark Deschenes, District Commander

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Our value to the nation rests in your hands

Expressing our value to the nation has been a communication theme for the Rock Island District and the Army Corps of Engineers for more than a year. The theme makes sense: in these challenging fiscal times it is important that the American people, whose tax dollars fund our operations, are made aware of what value those hard-earned tax dollars produce. It is our job to let America know that what we do is important in their daily lives.

Since becoming the commander here, I have seen us do a great job in explaining the many different values to the nation we provide. Whether it is the monetary savings we produce through flood risk management projects, or the benefits our navigation system provides to our nation's economy, our District can point to countless projects that are of intrinsic value to the nation.

But one critical spoke in our "value wheel" is easily overlooked and yet it is by far the most important – our workforce. I and other senior leaders are well aware of how lucky we are to have such an outstanding, professional workforce. Sometimes events and milestones provide me a gentle reminder of just how valuable this workforce is to the nation.

The holidays and the end to 2013 was one such opportunity for me to be reminded. As I recollected the year in its entirety it really is quite amazing the adaptability and readiness displayed by all of our employees. The District faced adversity in the form of three major floods and a dam emergency at Marseilles, Ill., that garnered attention from our most senior leaders and will present engineering and project management challenges well into the future. The floods and the damaged dam represent a snap shot of the many challenges you all overcame. The District workforce faced this adversity while suffering through the government sequestration and two instances of furlough.

Last year was challenging, to say the least, but 2014 has begun with little to no slow down. The new year brought a cold snap that blanketed most of the country causing record low temperatures. And, although this part of the country is used to sub-zero temperatures in January, the American people may not be as aware that even though schools and many businesses are closed, the Rock Island District workforce provides value no matter the weather.

In freezing cold temperatures, our maintenance crews on the Mississippi and Illinois Rivers continued their work to keep our infrastructure serviceable. Like I wrote earlier, it is easy to put a value to that infrastructure because economic savings are easy to calculate. The locks and dams provide a thoroughfare of commerce vital to the nation and global economies. But those pieces of infrastructure are useless without a workforce to maintain and operate those pieces. It is our people who are providing that valuable resource to the nation.

Lock 22 on the Mississippi River was scheduled for gate changes in early January and the sub-zero temperatures did not slow our workforce. These gate changes are critical to maintaining the lock structure. Dewatering began on Jan. 7 and the work to change the gates is on schedule, ensuring the need for closure only lasts until early March when navigation traffic begins to resume normal operations. That is just one example and countless others can be found throughout our various field sites where working outside is part of the job and the Rock Island District workforce seems proud to do it.

As you collectively look forward to the challenges and opportunities of the new year, remember that what we do is vital to the nation. I believe that each of you are excellent stewards of the public trust and I think as an organization we strive to be fiscally responsible with those hard-earned tax dollars. The projects and programs carried out within the Rock Island District are important to the Midwest region and our country. None of those projects and programs exists without your dedication and diligent expertise. We can easily point to facts and figures that portray the importance of what we do for this nation but the American public should know that the real value is being provided by their friends and neighbors – the workforce of the Rock Island District. Thank you for all you do and continue **BUILDING STRONG**.

A new class of leaders

By Hilary Markin, Editor

Rock Island District officially launched the Leadership Development Program (LDP) Level II Class of 2014 in October; however, it didn't start until November due to the government shutdown.

Despite the delayed start the new LDP Class has not wasted anytime. Orientation was held Nov. 12 at the Clock Tower Building followed by a two-day initial workshop in Dubuque, Iowa.

Program facilitator, Sue Conklin, of Evans and Associates Consulting Corporation, who the District's contract is with, kick started the program with an overview and outlined the program's expectations.



Lt. Col. Todd Reed, deputy commander, talks with the current class of Leadership Development Program participants, their mentors and supervisors, Nov. 15, in the ABC Conference Room at District Headquarters. *Photo by Sara Paxson*

During the workshop participants received their 360 evaluations, which is a compilation of feedback from the participant's supervisor(s), peers, subordinates, as well as a self-evaluation. "This was a good candid way to get feedback from coworkers and supervisors," said Chad Weuste, program participant from Coralville Lake. "The feedback we received showed us where our strengths and weaknesses are and what we can work on."

They also participated in the Myers-Briggs Type Indicator assessment – this combined with the 360 helped them develop more self awareness. After the workshop the participants used these as a starting point in developing their Individual Development Plans, which are goals they want to achieve during the program.

In addition to the assessments, participants met with their supervisors and mentors who are helping to guide them through the program. Conklin led a short briefing explaining the roles and responsibilities for those involved in the program to help ensure success on all parts, the mentee, mentor and the supervisor.

"The feedback and guidance that I have gotten from my mentor, Sally Duncan, has been fantastic," said Weuste. "She has helped to open my eyes to the rest of the District which is one of the things I was hoping to gain from my participation in the program."

Since the initial workshop, participants have attended monthly meetings and are working on their team project.

"We have had a few hiccups," said Rachal Deahl, program participant from the Equal Employment Opportunity office. "I have been impressed by everyone's flexibility and how we've made wise use of the time we have been together."

During each of the training sessions a guest speaker is invited to present a leadership topic usually surrounding the focus for that month. To date, two speakers have cancelled at the last minute but the LDP team was able to use that time to focus on the development of their team project. In addition, the facilitator was caught in the polar vortex in January and had her flights canceled.

"There have been some logistical challenges outside of our control," said Sara Paxson, professional development specialist who oversees the program. "The team has been very flexible and willing to adapt which is something good leaders have to do."

Through the hiccups the team has gotten off to a great start on their team project.

After a lot of discussion and reaching out to various offices in the District, the team presented three project ideas to the Executive Steering Board (ESB), Jan. 13, highlighting their preferred idea.

That preferred idea was development of a District Science, Technology, Engineering and Mathematics (STEM) program.

"The importance of STEM education for increasing the number of future scientists, technologists and engineers needed to sustain and grow our technologically advanced society has become a priority from the White House down to the Rock Island District and local communities," said Eric Johnson, program participant from Engineering and Construction.

This project aligns with the Corps Campaign Plan Goal 4: Prepare for Tomorrow. In particular, it aligns with Rock Island District's Action 4d2a which is to increase STEM initiatives with a projected end state of increasing the number of graduates with



The Leadership Development Program Level II Class of 2014 is (from left) Jonathan Wuebker, Adam Ziegler, Brad Palmer, Chad Weuste, Mark Pratt, Nate Richards, Paul St. Louis, Josh Cackley, Chris Reger, Eric Johnson, Rachal Deahl and Anthony Heddlesten. Photo by Sue Conklin

degrees in engineering, sciences and technology during the next 10 years.

The District's STEM Coordinator is currently Rick Nickel, who is also a Mississippi Valley Division Emerging Leader. The team plans to work closely with him to help better formulate and grow the program throughout the District.

"We plan to take a look at the existing STEM program and what ways we can improve it," said Johnson. "We have started to identify some ideas such as an implementation plan, a more organized effort as a District, a directory of volunteers and what events the District could participate in to promote both STEM and the Corps of Engineers."

These ideas are just some of the ones the team has come up with so far. During the month of February the team will be researching more possibilities and welcomes feedback from fellow employees.

The team will present their final team project to the ESB in August as part of their graduation from the District's Leadership Development Program.

Partnering meetings improve strategic engagement and communication

By Hilary Markin, Editor

part of the Rock Island District's culture has been conducting yearly partnering meetings with four of the five states the District serves. Those states include Illinois, Iowa, Missouri and Wisconsin. The District's civil works boundary also includes two small portions of Minnesota which has seen very few issues over the years.

The partner meetings are held at the state level and include the directors and assistant directors of the state departments of natural resources, transportation, homeland security, agriculture, economic development and emergency management. Also attending are each of the Corps districts who have jurisdiction within the state. For example, the Wisconsin Partnering Meeting included Rock Island, St. Paul and Detroit districts.

"Bringing everyone into the room together really helps open the communication lines and ensures we are all being one disciplined team – working more efficiently and effectively to solve the various water resources issues each state faces," said Angie Freyermuth, outreach and customer relations specialist, who facilitates the meetings.

The main objectives of the meetings are to update one another

on department or agency projects, initiatives and funding. There is also a sharing of lessons learned, ways to improve partnerships or processes and the identification of opportunities for new partnerships or collaboration.

"An added bonus to the meetings sometimes is the sharing of information within," said Freyermuth. "As information is reported out sometimes your take away is a lesson learned while other times it's an opportunity to join resources."

The District conducted partnering meetings in Iowa, Illinois and Wisconsin in November and December. The Missouri Partnering Meeting is mid-January and includes a two-day meeting. The first is at the working level where those who communicate directly on projects get together. The second is a more formal meeting in which the directors and commanders exchange information and discuss future direction.

The partnering meetings play an important role in the District's success and aligns with the Corps Campaign Plan Goal 4b1 to improve integrated Strategic Engagement and Communication.



An image of the design for the temporary trunnion anchorage for Pier 2 of the Marseilles Dam is laid over top of what was installed in July. Gates 2 and 3 were successfully attached to the temporary trunnion anchorage, which serves as a pivot point for the gates as they are moved up and down to maintain the 9-foot navigation channel on the Illinois River. The gates and the trunnion anchorage were damaged when a tow moving barges on the Illinois River lost control April 18 in the strong river currents and ended up against the dam. Photo by Kirk Atwater

Ingenuity at its finest

By Hilary Markin, Editor

ometimes text book answers just don't cut it and you have to apply your knowledge, creativity and ingenuity to come up with a solution. That's what happened in April when an incident at Marseilles Dam had engineers putting their heads together.

The incident occurred April 18 when a tow moving barges on the Illinois River lost control in the strong river currents and seven of the fourteen barges that broke free ended up against Marseilles Dam damaging several gates.

"The gates were installed in 1985 when the dam was rehabbed," said Kirk Atwater, structural engineer. "When we got inside the gates to perform the post-accident inspections, we found them to be in relatively good shape (not including the damaged areas) considering they had been in operation for nearly 30 years."

The initial inspection determined that five of the eight dam gates sustained significant damage during the collision. That damage included the bending of the steel skin plates and internal structural members in addition to concrete impact damage to the piers.

It also revealed that two of the gates (Gates 2 and 3) experienced a tearing of the upstream steel skin plate resulting in large holes in the gates.

The most critical damage was to the Pier 2 trunnions, which are hinges that anchor the gate to the dam. When the Pier 2 trunnion anchorage failed, the trunnion beam that connects the gates to Pier 2 broke free and fell into the river, rendering the gates inoperable. Gate 2 was then displaced downstream and wedged

within the dam piers. This damage required an emergency temporary repair, and is what structural engineers focused their efforts on.

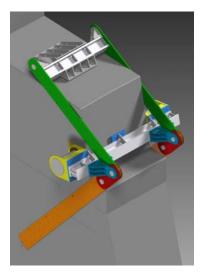
They used Autodesk Inventor, a 3D computer-aided design software, to work through various design concepts to find a temporary solution to allow the gates to be operated in emergency conditions to maintain the 9-foot navigation channel and reduce flood risk.

"We conducted multiple analyses of the design components for the appropriate load cases and made neces-

sary adjustments to keep the gates operational during emergency conditions," said Atwater.

During the design phase, engineers met with personnel from the Mississippi River Project Office who would be fabricating the trunnion anchorage and the Illinois Waterway Structural Maintenance Crew who would be installing it.

"We got them involved early on in the project to get their valuable input," said Atwater. "Sometimes what seems like a good design to us can be difficult to fabricate or install based on





An excavator pushes on Gate 2 at the Marseilles Dam to reposition the gate so the temporary trunnion anchorage can be installed. Photo by Kirk Atwater

existing site conditions. Working together allowed us to come up with a design that worked best for everyone involved."

The final design was completed in early June and fabricated later that month.

"In order for the trunnion anchorage to be properly installed, Gate 2 had to be moved back into position, which required a monumental effort," said Atwater. "The north side of the gate had to be moved nearly two and a half feet back upstream."

Using a bulldozer, excavator, barge-mounted winch, and a 9-ton comealong, the Illinois Waterway Structural Maintenance Crew maneuvered the gate back into position to begin



Photo by Kirk Atwater

installing the new temporary trunnion anchorage. The entire installation process took nearly two weeks to complete in July.

As in any project, teamwork is imperative and this was no exception.

"Doing what we did in such a short amount of time required

a tremendous amount of teamwork," said Atwater. "This project was unique in that in-house resources were used from start to finish, which was a great experience for all involved. The expertise of the Mississippi River Project Office and the Illinois Waterway Structural Maintenance Crew really made this project the success that it was."

As the Marseilles project evolves, design work for the permanent repairs is now in full swing. Structural engineers have been preparing design plans for the replacement of three gates and the repair of two others. In addition, the anchorage on Pier 2 needs to be completely replaced.

"By the end of January, we will have the 35 percent District quality control review for the permanent repairs," said Atwater.



The Manitowoc 777 crane lowers part of the new trunnion anchorage into place on Pier 2 at the Marseilles Dam. Photo by Kirk Atwater

"This is really aggressive, but we are on track to have a solicitation out this summer."

The project also underwent a Value Engineering (VE) study during the first full week of January. Engineers from the Inland Navigation Design Center spent a week in Rock Island providing a new set of eyes to the project. The Corps adopted VE as a cost savings tool in 1964 based on the success of the Navy's Ship Building Program with using Value Engineering. Although it has taken on many forms over the years the goals include validating key project decisions, keeping the project within budget, reducing operation and maintenance activities and costs, improving project performance, function and quality; and reducing design and construction problems. Learn about VE at http://www.usace.army.mil/ValueEngineering.aspx.

"This project has had its challenges, but it has also been rewarding," said Atwater. "Sometimes you work on projects and nothing is constructed for 10 years. With this one, designs came to life in a matter of months."

The District has 13 structural engineers and two computer-aided design technicians who work in the Structural Section of Design Branch, Engineering and Construction Division. A majority of their work involves existing structures and the repair of our aging locks and dams and other infrastructure. The other part of their job is designing new structures on a variety of flood control, navigation, and building projects like the Davenport Flood Risk Management Project's flood wall that was completed in November. They are also responsible for performing periodic inspections, assessing the condition, making recommendations, and writing inspection reports. These inspections ensure that the Corps' locks, dams, bridges, and flood control projects comply with federal and Corps regulations and policies.



Adult emerald ash borer beetles are approximately ½ inch long. They are metallic green with a purplish red abdomen beneath their wings.

Help stop the spread

By Kacie Norton, biologist

he emerald ash borer (EAB), Agrilus planipennis, is an invasive beetle from northern China which is responsible for killing tens of millions of ash trees throughout the Northeastern and Midwestern United States. The current sweep of EAB infestation has caused billions of dollars in both economical and environmental damage. Ash trees are cheap ornamental trees that raise property values as well as offer strong and resilient wood for baseball bats, bows, tool handles, etc. All ash tree species are susceptible to EAB invasion causing the need for strict management and prevention measures. Since their North American discovery in southeastern Michigan in the summer of 2002, EAB have spread to 22 states and into parts of Canada either due to natural dispersion or through hitchhiking in firewood.

Adult EAB populations forage on ash tree leaves but don't kill trees; however, their flat, creamy white larvae bore through the bark and create feeding tunnels in the cambium, damaging the phloem and killing the tree by severing the transportation of water and essential nutrients through the tree. Immediately identifying an outbreak of EAB can be difficult. Woodpeckers feed on the EAB larvae; therefore, increased visible woodpecker activity is very diagnostic for the presence of an EAB invasion. During the early stages of EAB activity, there is also visible decline in the tree's canopy, bark, and newly formed branches. As the infestation becomes more severe, the canopy begins to dieback and vertical bark splitting occurs due to woven tunnels formed from feeding larva. One-eighth-inch D-shaped exit holes will also appear in the trunk from adult EAB beetles emerging in June. These exit holes are not a helpful indicator because they are present in the tops of the tree and are very small. The process from infestation to death can take three to five years in large trees though smaller ash trees die within a year.



Ash tree leaves are compound and composed of 5-11 leaflets.

Currently, eradication of EAB populations is not feasible. Researchers from government agencies, non-government agencies, and universities are working together to find natural enemies, called biocontrols, and insecticides that can be used to protect trees. Monitoring and detection efforts are being carried out at Corps recreation sites via sticky traps, intentionally stressing trees to attract adult EAB by tree girdling, and by peeling the bark on dying trees to see if EAB are present. The Animal and Plant Health Inspection Service (APHIS) instituted federal quarantines on firewood from infected areas and states have also issued quarantines. Iowa prohibits the movement of firewood from quarantined areas to state and federally managed parks and Illinois restricts firewood from quarantined areas as well as adjacent counties. It is hoped that firewood quarantines



In the fall, larval EAB create galleries under the bark as they feed, inhibiting the transportation of necessary nutrients.

will slow the spread of EAB populations and save the economy millions of dollars in ash tree damage. The Corps's rangers, foresters, and biologists are doing their part to reduce the spread of EAB populations by educating the public of the dangers of EAB, the benefits of purchasing local firewood, and the reasons for restricting firewood transportation and enforcing quarantines. Storing, using, and transporting any firewood originating from out-of state or violating the firewood quarantine is strictly banned on Corps project lands unless it is certified pest-free by the United States Department of Agriculture or

other appropriate state agencies.

To do your part in containing EAB populations, leave all firewood at home when traveling. Using firewood from local sources will help slow the spread of EAB to as little as half a mile per year. If an ash tree is present in your yard, you can observe the symptoms mentioned above: woodpecker activity, canopy dieback, and vertical bark splitting. Finally, shoots growing from the bottom of the trunk, called epicormic branching, is present in later stages of infestation to try to compensate for decreased canopy health.

For more information on EAB, quarantine boundary lines, and contact procedures for suspected infestation, please visit www. emeraldashborer.info.

Information and photos from www.emeraldashborer.info and the Rock Island District Recreation page http://www.mvr.usace.army.mil/Missions/Recreation/EmeraldAshBorer.aspx

Martin Luther King Jr. Day of Service - Jan. 20

By Liz Robinson, Equal Employment Office

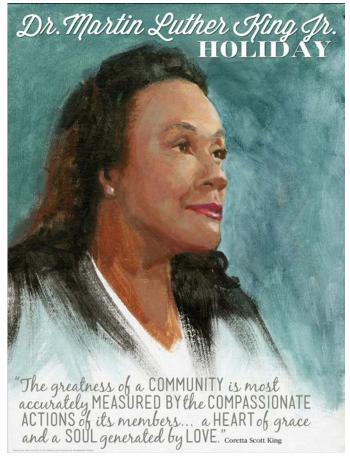
Te have all heard about Martin Luther King's role in the Civil Rights Movement starting from when he was a young pastor in Montgomery, Ala., until his death in Memphis, Tenn., while he was working with a garbage collector strike. Here is a summary of his contributions to civil rights.

In Montgomery, Ala., he organized a bus boycott of the city buses. At this time African Americans had to sit at the back of the bus and had to give their seats up to Caucasian people if there were no seats left. After Rosa Parks refused to give up her seat, African American people boycotted the city bus system. The result was a financial disaster for the city which led to negotiations and a favorable settlement. It also established the use of nonviolent means to confront segregation and racism.

Long hard battles were fought to desegregate Birmingham and Selma, Ala. In these eras, both because of state and local government regulations as well as threats of violence and job loss, very few African Americans were registered to vote. This allowed segregationists to control the local political and legal climate and to perpetuate the "Jim Crow" laws, which originated with the Post-Reconstruction Black Codes, designed to limited the economic and political power and social standing of African Americans. Dr. King's speech at the March on Washington addressed this situation as well as his goals for full equality.

After his assassination it was a long struggle to establish the Martin Luther King Day federal holiday. A bill was introduced in Congress four days after his death. The bill was defeated in Congress several times. The bill was supported by many people including Coretta Scott King, Congressman John Conyers, Stevie Wonder, and President Carter, among others. The bill was finally passed 15 years after King's death in November 1983. President Reagan signed the bill establishing it as a national holiday in 1983. The first national observance came in 1986. In 1992, President George H. W. Bush established it at the present date of the third Monday in January. Arizona in 1992 and South Carolina in 2000 became the last two states to recognize the holiday.

Martin Luther King Day is always observed with the same theme: "Remember! Act! Celebrate! A Day On...Not a Day Off." Americans are encouraged to celebrate the day by volunteering to help others in some way. Anyone or any group of people can use the day to participate in such community projects as services for the elderly, school-age programs including recreation and tutoring; assisting the humane society and animal shelter among others. Donations are also a way of participating in the Day. You may find other options at mlkday.gov. This website maintains a clearinghouse of activities different groups and individuals are conducting.



This year, the Defense Equal Opportunity Management Institute's Dr. Martin Luther King Jr. holiday poster features a painting of Coretta Scott King, Dr. King's wife. The couple were married on June 18, 1953, in a ceremony conducted by the groom's father, the Rev. Martin Luther King Sr.

Coretta Scott King was preparing for a career as a singer when she met the young preacher. As he became a leader in the growing civil rights movement, Mrs. King was often at her husband's side in civil rights marches and demonstrations, and she often was alone with their four children as King traveled for the cause.

Widowed when he was assassinated in 1968, Coretta Scott King took up the mantle of his civil rights non-violent activism and worked to keep his dream and memory alive until her passing in 2006 at the age of 78. She remains an inspirational figure to men and women around the world.

DID YOU KNOW

Martin Luther King Jr. was awarded the 1964 Nobel Peace Prize. Gunnar Jahn, Chairman of the Nobel Committee, said in his presentation speech: "He is the first person in the Western world to have shown us that a struggle can be waged without violence. He is the first to make the message of brotherly love a reality in the course of his struggle, and he has brought this message to all men, to all nations and races."



Spotlight on the District



Joint Task Force - Unwatering was selected by the Corps of Engineers as the 2013 Project Delivery Team of the Year for Honor. Above members of the team paused for a photo on one of their last nights in New York City. Photo by Ron Fournier

USACE PDT of the Year for Honor – Joint Task Force - Unwatering

By Hilary Markin, Editor

fter a whirlwind emergency response effort following Hurricane Sandy, the Joint Task Force - Unwatering Project Delivery Team was chosen as the U.S. Army Corps of Engineers (USACE) 2013 Project Delivery Team of the Year for Honor.

USACE was assigned by the Federal Emergency Management Agency (FEMA) to provide technical and unwatering assistance to 14 locations in the New York City metro area in the aftermath of Hurricane Sandy. These locations included nine subway tubes, two AMTRAK tunnels and three of the city's primary roadways, including the longest coastal tunnel in North America that had been flooded. HQUSACE quickly turned to the Rock Island District, who in conjunction with the New York District rapidly established a Joint Task Force Unwatering (JTF-U) Project Delivery Team (PDT).

This was the first time that water had inundated critical New York City underground transportation infrastructure to this extent; and the city did not have emergency plans or adequate resources to provide a timely response.

"A lot of eyes were on us. We were described in numerous media accounts as the Corps of Engineers' Unwatering SWAT Team," said Roger Less, Chief of Design Branch for the Rock Island District who helped lead the effort.

The task force worked to quickly identify resources including USACE staff from both within and outside MVD, leveraging existing relationships with the U.S. Navy's Supervisor of Salvage and Diving and establishing a new relationship with the U.S. Coast Guard's Atlantic Strike Team.

"These relationships proved to be a key to the success of the mission," said Less. "This was truly a team effort, one that came together on-the-fly but was tremendously successful."

Together the team persevered and successfully removed nearly 500 million gallons of seawater from the network of underground tunnels in timeframes that were significantly less than anticipated.

The PDT's efforts supported two of the Corps' Campaign Plan Goals – Goal 1: Ready for All Contingencies – Deliver USACE

support to combat, stability, and disaster operations through forward deployed and reach back capabilities; and Goal 2: Recruit and Retain Strong Teams – Build and cultivate a competent, disciplined, and resilient team equipped to deliver high quality solutions.

"Applying past Rock Island unwatering experience with local knowledge of the tunnels, we came up with some innovative engineering solutions to get New York's mass transit system of tunnels and underpasses back to a non-flooded condition where the city could get them back up and running as quickly as possible," said Less. "We had the right people on the team to provide unwatering support in those emergency conditions."

Each year USACE recognizes three PDT's for project delivery accomplishments in support of the Corps missions as PDT of the Year for Excellence, Honor and Merit. The nominations must demonstrate synergy, integrated and coordinated management, teamwork, partnering, effective balancing of competing demands, applications of innovative technology and tools and sharing of lessons learned.



Denny Lundberg, chief of Engineering and Construction, Roger Perk, now assistant chief of Engineering and Construction and Col. Mark Deschenes, District commander, meet outside the mobile command center with Capt. Mark Matthews, U.S. Navy supervisor for Salvage and Diving, regarding Joint Task Force - Unwatering efforts in New York City. Photo by Roger Less

Expanding training opportunities

Safety officers certified as OSHA Outreach trainers

By Hilary Markin, Editor

In today's budget climate and the cutback on training, the Safety Office has found different ways to train employees at a fraction of the cost.

Troy Larson, chief of safety, and Jeff McCrery, safety specialist, completed the necessary coursework to become Occupational Safety & Health Administration (OSHA) Outreach trainers two years ago.

Since then, they have been teaching OSHA's General and Construction industry 10-hour and 30-hour classes. The 10-hour class is for entry level workers, while the 30-hour class is for supervisors and workers with some safety responsibility.

The trainings focus on the recognition, avoidance, abatement and prevention of safety and health hazards in the workplace. It also includes information regarding workers' rights, employer responsibilities and how to file a complaint through OSHA.

"Being trainers allows us to add our own flare to the trainings using the Corps Safety manual and our own hazardous analysis," said Larson

To keep their certification they are required to attend a trainer update course every four years.

To date, they have taught more than 200 employees saving the District time and money for tuition and travel expenses.

The most recent trainings have been in preparation for the winter dewatering at Lock and Dam 22 on the Mississippi River.

"We held a class this fall for 28 employees at the Mississippi River Project Office in preparation



for the dewatering at 22 and for the collateral duty safety officers," said Larson. "The training is an added measure to improve hazard recognition and reduce potential injuries."

In FY 14 the Safety Office will continue to expand the teaching possibilities and additional training opportunities to District employees.

HOT OFF THE PRESS

2013 Illinois Waterway Navigation Charts

By Hilary Markin, Editor

he 2013 Illinois Waterway Navigation Charts were completed in December and replace the 1998 version of the charts. The new charts are produced from the most recent aerial photography and survey data the Corps acquired or had access to.

To produce the charts that extend beyond the Rock Island District's boundaries, Dan McBride, Technical Support Branch, Operations Division, worked with the Corps' Chicago and St. Louis districts to acquire the necessary data for their portions of the river. He also worked with the U.S. Coast Guard's Bridge Branch in St. Louis to ensure accuracy of data displayed on the charts.

In addition to the approvals of the partners involved with this project, they were also shared with the Illinois River Carriers Association to provide input.

"We went through numerous internal and external reviews," said McBride. "We wanted to ensure we had a quality product that would sustain us until the next update."

Paper navigation charts should be updated every five years according to the latest U.S. Coast Guard carriage requirements for towing vessels. McBride started the process of updating the Illinois charts in 2012 after the publishing of the 2011 Upper Mississippi River Navigation Charts.

In addition to the new paper chart copies now complete for both rivers, the websites where the individual charts can be printed and downloaded has been upgraded to include an interactive map and chart index.

"The new sites are user friendly and allow users to easily locate the chart that shows the stretch of river they are interested in," said McBride. "Users can easily zoom in to an area on the river and download the chart."

The downloadable charts are print-quality Adobe Acrobat files that are digitally encoded with geographic coordinates. Get them here www.mvr.usace.army.mil/Missions/Navigation/NavigationCharts.aspx.

"The files are geo-referenced which means users can down-load an app like PDF Maps (for free) to their smart phones and use the built-in GPS capability to see where they are in real-time with the navigation chart as a background. You can also measure distances and areas, as well as record notes or take photos tied to locations," said McBride.

In addition to the paper charts, Inland Electronic Navigation Charts (IENCs) are produced for use with Electronic Chart Systems (ECS). An ECS allows the display of navigation charts, along with the vessel position, other vessels' positions from Automatic Identification Systems (AIS), and other information feeds on a computer screen. An ECS is not a replacement for



paper charts from a legal standpoint, but is intended to improve mariners' safety. The Corps updates IENCs on a monthly basis, sometimes sooner, ensuring the most up-to-date information is available. These charts include the most recent Coast Guard Local Notices to Mariners which are produced weekly and include changes to aides in navigation, light outages, restrictions, etc.

In coastal areas, which includes the Great Lakes, Electronic Navigation Charts (ENCs) are produced by NOAA. NOAA's ENC data for Chicago and Calumet Rivers and Harbors was included in production of the Illinois Waterway paper charts.

"We worked with NOAA to ensure our IENC coverage was seamless with their ENC coverage where the Illinois Waterway approaches Lake Michigan," said McBride. "The electronic charts and the paper charts are both tools to ensure boaters have a safe boating experience. They are a great reference for boaters who are maybe planning a trip or as a reference while on the water."

Where to obtain hard copy navigation charts

The navigation charts are sold through cooperative agreements between the Corps of Engineers and Eastern National and the Quad Cities Convention and Visitors Bureau. The updated Illinois Waterway charts cost \$12.98 plus tax and shipping (if applicable). Charts may be purchased in person or over the phone from the Illinois Waterway Visitor Center, located at 950 North 27th Road, Ottawa, Ill., phone (815) 667-4054; and from the Mississippi River Visitor Center, Arsenal Island, Rock Island, Ill., phone (309) 794-5338. Telephone orders must be paid by credit card (VISA, Master Card or American Express). Discounted pricing is applied to orders of ten or more. For more information contact the Illinois Waterway Visitor Center at (815) 667-4054 or visit www.mvr.usace.army.mil/Missions/Navigation/NavigationCharts.aspx.

SAFETY CORNER

Old Man Winter

or many people, working or playing in cold weather can be a positive experience. You may feel invigorated by the bracing air and feel like doing your work with more physical energy than usual. When it comes to leisure, cold weather offers many enjoyable activities whether it's skiing, skating, snowmobiling or ice fishing.

Unfortunately, all the enjoyable aspects of working or playing out in cold weather can turn negative if you are not dressed warm or dry enough. Never underestimate winter's blast. They call winter an "old man" but he's far from frail. In fact, he's apt to strike a deadly blow when you least expect it.

Here are some tips for battling Old Man Winter

- Watch out for the sun. The season's frigid temps shouldn't fool you snow reflects more
 than 75% of the sun's damaging ultraviolet rays. Protect your face and eyes from the sun
 before you go out to work or play.
- Make sure you winter gear is the right fit. Winter wear should fit properly, but gear shouldn't be so tight that it restricts movement. This is particularly true for footwear. Boots that are too tight constrict blood flow, causing feet to become even colder. When sizing shoes for outdoor winter activities, allow room for an extra pair of socks.
- Be smart about clothing choices. When heading out to work or play, make sure you are dressed warmly in layers that are wind and waterproof. If possible, opt for wool instead of cotton. Wear synthetic fibers such as polyproplyene next to your skin to wick away sweat.
- Get around safely. Driving in winter can be dangerous, so you should make sure you're ready for any situation. Make sure your car is winterized with proper tires, antifreeze, and windshield washing fluid. Prepare your car for emergencies by keeping a first-aid kit, blankets, shovel, rock salt, ice scraper, water, and nonperishable snacks in your trunk.
- Practice safety when playing outdoors. Ice skating should only be done on ice that has passed proper inspection. Sledding paths
 shouldn't be too crowded or too close to roadways. If you're trying skiing or snowboarding for the first time, consider getting
 lessons from an instructor. While out on the slopes, consider wearing helmets and gloves with built-in wrist guards. This can
 prevent serious injuries.
- Eat healthy snacks. Good nutrition can help fight off colds and flu, so strengthen your immune system with a balanced diet. Try dried and fresh fruits, sliced raw vegetables, whole-wheat crackers with cheese, and yogurt for snacks instead of that donut or cookie.
- Stay hydrated. Although you may not be sweating as much as you do in warm weather, you still need to keep hydrated. In addition to water, consider low-sugar juices or decaffeinated tea and hot cocoa. Avoid caffeinated and alcoholic beverages. They can dehydrate you more.
- Make sure your home is safe and ready for winter weather. Be prepared for unpredictable weather conditions by stocking up on essentials, such as extra batteries for flashlights, bottled water, first aid staples, and nonperishable food items. Safety kits can
 - help protect your family in extreme situations
 - Get your kids prepared. Make sure your kids have the right clothing for the weather conditions. Place an extra pair of gloves and tissue packs in their book bags. These necessities will help prevent the spread of germs, and come in handy if a glove goes missing.
 - Heat your home safely. Make sure your home's heating equipment and your smoke and carbon monoxide detectors function properly. If you use a space heater, make sure it is UL or CE approved and keep it away from pets and small children. Finally, don't forget to discuss fire safety with your family each winter; the likelihood of indoor fires increases during the colder months.
 - Work safely. Avoid activities that lead to heavy perspiration. Never work alone use the buddy system. Watch for symptoms of cold-related illness and seek shelter and first aid if systoms arise.

With its cold and often stormy weather, winter presents many safety challenges. Being prepared and following these few simple safety tips can help you stay safe and warm this season.







Around the District

Retirements ...

Ron Williams, supervisory appraiser, Real Estate Division, retired Dec. 28 after dedicating 26 years to the federal government.

Dennis Pollock, maintenance worker, Maintenance Section, Mississippi River Project, Operations Division, retired Dec. 31 after dedicating 16 years to the federal government.

Gene Larue, lock and dam operator, Lock and Dam 16, Mississippi River Project, Operations Division, retired Dec. 31 after dedicating 20 years to the federal government.

Steven Burroughs, lock and dam operator, Peoria Lock and Dam, Illinois Waterway Project, Operations Division, retired Dec. 31 after dedicating 10 years to the federal government.

Wayne Hannel, regulatory project manager, Regulatory Branch, Operations Division, retired Jan. 3 after dedicating 40 years to the federal government.

Larry Rodriguez, lockmaster, Marseilles Lock and Dam, Illinois Waterway Project, Operations Division, retired Jan. 3 after dedicating 28 years to the federal government.

Gary Swenson, chief of Natural Resource Management Section, Mississippi River Project, Operations Division, retired Jan. 10 after dedicating 30 years to the federal government.

Congrats ...



Congratulations to **Eric Johnson**, and his wife Shannon, on the birth of a baby girl Nov. 4. Harper Grace weighed seven pounds two ounces and was 19 and a half inches long.



Congratulations to **Adam Ziegler** and his wife, on the birth of a baby boy Jan. 5.
Nicholas Adam Timothy weighed nine pounds seven ounces and was 19 and a half inches long.

Sympathy ...



Edwin Burger, 88, of Davenport, Iowa, passed away Nov. 17 at Ridgecrest in Davenport.

Burger worked for the Corps of Engineers in Rock Island and Sacramento. He retired in 1993 from the Rock Island Arsenal after 34 years of service.



Joseph Cotton, Jr., 72, of Braidwood, Ill., passed away Dec. 8 at the Joliet Area Community Hospice Home in Joliet, Ill.

Cotton was previously employed at Uniroyal in Joliet, Ill., and the Joliet Lock and Dam.

He also served in the U.S. Navy during Vietnam.



Evan "Jace" Clark, 80, of Braceville, Ill., passed away Dec. 12 at his home.

Clark worked as a lock and dam operator at Marseilles and Dresden Island until his retirement in 2001.

He also served in the U.S. Army.



Donald Cox, 79, of Davenport, Iowa, passed away Dec. 26 at the Aledo Health Care Center in Aledo, Ill.

Cox worked as a lock and dam operator for Pool 13 for 16 years, retiring in 1975.

He also served in the U.S. Army during the Korean Conflict.



Tom Lisco, 65, of Sherrard, Ill., passed away Dec. 29 at his home.

Lisco worked for the Corps of Engineers in the Information Management Division. He retired after 39 years of service.

Support & Sacrifice for the Corps

Thanks to the employees who are deployed to the Transatlantic District - Afghanistan (TAA)!





Randy Braley shakes hands with Col. Mark Deschenes, Rock Island District Commander, after being awarded the Bronze Order of the de Fleury Medal Dec. 9, for his service and support as the Kabul Area office, Afghanistan resident engineer and for his 32-years as a Corps of Engineers employee.

Randy Braley receives Bronze Order of the de Fleury Medal

By Hilary Markin, Editor

Randy Braley, civil engineer, Construction Branch, Engineering and Construction Division, was awarded the Bronze Order of the de Fleury Medal by the U.S. Army Corps of Engineers Rock Island District Commander, Col. Mark Deschenes, during an awards ceremony Dec. 9 at the Naval Reserve Center on Rock Island Arsenal, Rock Island, Ill.

On behalf of the Engineer Regiment, Col. Deschenes presented Braley the medal in recognition of his exceptionally meritorious service and support while serving as the Kabul North Area office, Afghanistan resident engineer and for his 32-years as a Corps of Engineers employee.

Braley has proudly served the Engineer Regiment and the federal government serving in various capacities as a civil engineer for the U.S. Army Corps of Engineers and Department of Veterans Affairs.

During the award ceremony, Braley was also awarded the Superior Civilian Service Award for his service as resident engineer with Transatlantic District North, U.S. Army Corps of Engineers, in support of Operation Enduring Freedom during his deployment from July 2012 to July 2013. His dedication, selfless service and leadership were essential to the overall success of more than \$400 million in construction contracts for the Kabul Area Office.

Braley has deployed four times during his employment with the U.S. Army Corps of Engineers; twice in support of Operation Iraqi Freedom (Iraq) and twice in support of Operation Enduring Freedom (Afghanistan).

Throughout his career, Braley's high degree of professional competence, strong devotion to duty and country, and high standards of integrity and character clearly set the standard for his colleagues and subordinates.

Braley's leadership, professionalism and technical competence are in keeping with the finest traditions of service and reflect great credit upon him, the Transatlantic District North, the Transatlantic Division, the U.S. Army Corps of Engineers and the U.S. Army.

The Army Engineer Association on behalf of the Engineer Regiment awards the de Fleury Medal to honor individuals who have provided significant contributions to Army engineering. There are four levels of the de Fleury: Steel, Bronze, Silver and Gold. The Engineer Regiment adopted the de Fleury Medal as an award because of the values demonstrated by the man for whom it was struck – French Engineer Francois Louis Tesseidre de Fleury, who in 1777 volunteered to serve with the American Army in its fight for independence from Britain.

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Retiree's Corner

This is a new section of the Tower Times to share information relating to retirees, where they are now, and the like. If you have ideas for articles or information you would like to see please email the editor at cemvr-cc@usace.army.mil or call 309-794-5730. Also if you would like to recieve the Tower Time electroncially please send an email to cemvr-cc@usace.army.mil.

News from the Office of Personnel Management...

The Office of Personnel Management is now offering more tools online to assist retirees in the management of their benefits. The Retirement Services Online now offers things like changing your federal and state income tax withholding, updating your address, changing your password, establishing allotments and setting up direct deposit of your payment. Two new services have been added recently including a place where you can update your email address and opt-in to receive information electronically and you can now view and print verification of your federal life insurance. To learn more go to www.servicesonline.opm.gov.

New site for retirement planning

A new website, www.myfederalretirment.com, offers valuable retirement information for all employees no matter your length of service. Newer employees, mid-career and sunset career employees will find information on this web page that is informative and helpful as you journey towards retirement. Please remember that the Army Benefits Center (ABC) is the official representative regarding retirement assistance and questions. They can be reached by phone at (877) 276-9287. ABC Counselors are available from 6:00 am to 6:00 p.m. central time, Monday through Friday.

Upcoming event - Mississippi River Visitor Center open house

The Mississippi River Visitor Center at Locks and Dam 15 is hosting an Open House Jan. 24 from 9 a.m. to 5 p.m. in celebration of new displays. During the last year the Visitor Center has been updated with new displays, historical Corps artifacts and interesting interactive displays for people of all ages. From 1-2:30 p.m. Corps staff will be available to answer questions about the missions of the Mississippi River Project. In addition, contractors and partners of the remodeling project will also be on hand. Simple refreshments (coffee, hot chocolate and cookies) will be available throughout the day in the lobby. Winter is also a great time to see the eagles feeding and roosting along the river below the locks and dam.