Project maintenance, cavitation repairs and on-the-job training

Preserving the past to accommodate the future

Stakeholders join personnel in critical flood fight training

Omaha Outlook

LVIS: a design-build success story

U.S. Army Corps of Engineers, Omaha District

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IN THIS ISSUE. . .

On the cover: A night time storm rolls in over LVIS. Photo by Harry E. Weddington

OMAHA OUTLOOK

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Well-trained leaders are essential to continuing our success

Joel R. Cross
Colonel
Omaha District Commander

When you get down to fundamentals, leadership is fairly simple; it requires us to know the details of our profession, to truly care and focus on our team members and to lead by example. To ensure the District's long-term success, we must develop these high-performing leaders. I am speaking about leaders who can set clear expectations; get the work done on time, on budget and with high quality. These leaders set the example by ensuring our workforce has the right skills (training and experience) and resources (time, money etc.) to succeed in their jobs.

This leads me to my main point that District leaders need to do a better job ensuring our workforce has the proper training to succeed. Here's why I say this; annually we budget $900 per employee for training and historically we don't use it. In FY11 we used 66 percent, in FY12 – 84 percent, in FY13 – 63 percent. Moreover, we recently queried 14 new employees with three to six months service and only three had individual development plans in place. I also believe we miss the mark on training our leaders in the skills they need to successfully supervise others. Couple these concerns with the fact we have 47% of our workforce retirement eligible and we have a recipe for motivation to take action to sustain our reputation. This is why our Operations Plan for 2014-2016 is cited as the Year of the First Line Leader. We are deliberately focusing resources to ensure leaders have the tools to be successful and through them, our superb workforce.

My challenge to District leaders is this - seize opportunities to ensure our workforce improves and sustains their skills regardless of personnel turnover and losses. It's imperative they know the details of their profession and I expect you to truly care and focus resources on training the team. Engage in candid conversations to develop and implement IDPs that ensure job success; focus on deliberate training opportunities, set clear expectations and resource your teams for success. You are not limited to $900 per person. Each organization has different needs. If you need more, I expect you to fight for your needs up the chain; if less, I expect you to share with others.

The district has executed record programs for six years—five of those years exceeding $1 billion...So in this "culture of execution" I heard it said that "on-the-job-training" is all we need. While it's certainly important—it doesn't take the place of providing a baseline level of knowledge and the tools necessary for employees to improve themselves and positively influence others.

Only a strong emphasis on actual mission-focused training can provide that.

As a public service organization, maintaining the public trust is essential for our survival. We maintain this trust by unleashing our workforce's vast knowledge and expertise in meeting customer commitments. That's what the Omaha District is known for, superb execution and we continually strive to be better.

This issue features stories of maintaining public trust though excellence. Our critical cavitation repair work at Gavins Point spotlights Corps expertise in safely operating and maintaining power generators. Our well trained workers completed a difficult job with no injuries. It also focuses on defining roles and missions of the district's Real Estate Division. New Chief, David Chipman, and his seasoned staff, strives to succeed in the many collaborative efforts outlined on page 4.

Cindy Upah's well-earned special opportunity (p. 6) to become a knowledgeable leader in the civil works arena started with her participation in the superb Leadership Development Program.

TEAM OMAHA—Keep up the great job and thanks for all you do!

Essayons.

Joel R. Cross

By EILEEN WILLIAMSON, *Public Affairs Specialist*

Project maintenance, cavitation repairs and OJT

Among the various projects taking place at Gavins Point Power Plant, generator unit number three was recently dewatered to allow project crews to inspect the draft tube for damage caused by cavitation and make the necessary repairs.

Cavitation describes the state-change from liquid-to-gas that occurs when water flows quickly through a confined space. As the water moves, the vapor pressure drops and the water changes directly to a gas. (Similar to water boiling without a temperature change). Cavitation is a common occurrence in hydroelectric turbines, and generally appears around guide vanes, wicket gates, the turbine blades, and in the draft tube.

Cavitation is always occurring as water pushes through the unit. When implosions, which occur during the liquid-to-gas state-change, take place near turbine structures, flow-surfaces can be damaged and eroded. Over time, the resulting pits or cavities multiply and require repairs. This type of cavitation can also occur on boat propellers.

If left unrepaired, the erosion damage can reduce the efficiency of power generation, potentially lead to further damage and ultimately cause major damage to the rest of the turbine.

Project crew members, Dave Timmerman, Steve Neumann and Mike Schnetzer, carry scaffolding platform sections for placement in the draft tube. Photo by Karla Zeutenhorst, Natural Resource Specialist.

According to Steve Neumann, Senior Mechanic at Gavins Point Dam, "We try to perform cavitation repairs every year on at least one unit. Each year, we un-water the units, one at a time and perform an internal inspection of the draft tube and scroll case, which includes taking blade clearance readings, inspecting the wicket gates, taking wicket gate clearance readings, and evaluating the overall condition of the scroll case."

The repair process does not always involve the detailed work that is taking place this year. "If we only have a unit down (dewatered and not generating power) for three or four weeks time constraints mean we don't typically install the scaffolding and stage the welding equipment," said Neumann.

Cavitation repairs had been delayed in recent years because of time constraints caused by the flooding in 2011, repairs following the flooding, water requirements and other impacts.

"Safety requirements have changed since the last time the scaffolding was placed at Gavins Point," said Mike Welch, Power Plant Superintendent at Gavins Point. "The safety requirements for inspecting the brackets that support the scaffolding have become more specific in how they must be inspected, just within the past year."

The cavitation repair process involves closing the intake gates; dewatering the draft tube; placing the scaffolding deck and scaffolding, which provides workers access to the areas requiring inspection and repair; performing the inspection; marking every pit on exposed surfaces in the draft tube that are larger than a salad plate; removing and cleaning damaged surfaces; and welding and grinding stainless steel to repair the damaged areas. Because of the changes to the safety requirements, the entire process is being documented and closely monitored.

The original draft tube scaffolding was wooden and hung from brackets mounted to the draft tube walls. In 1973, Gavins Point Dam began using steel scaffolding that was designed to provide a safer, more stable work surface.

"The documentation that is taking place with this installation will be used as a training tool for future project teams and will help others better understand the cavitation repair process," said Welch.

The scaffolding platform reaches first across the draft tube from the door and then builds out geometrically from the center structure. The hexagonal structure connects to anchor brackets on the draft tube wall and then supports a deck surface, which will accommodate scaffolding to provide safe access to the areas where cavitation impacts the turbine blade and the draft tube liner. Project crew members Dave Timmerman (photo 1), Dave Timmerman and Mike Schnetzer (photo 2), Mike Schnetzer and Dale Stibral (photo 3) place the scaffolding platform in the draft tube beneath the Kaplan Turbine at Gavins Point Dam. Photos 1 and 2 by Tim Welsh, Mechanical Engineer; photo 3 by Sean Denning, Structural Engineer.

Left: Mike Schnetzer in his supplied-air welding hood. Repairs are not unlike the process to repair a cavity in a tooth. The porous material is cut and removed by a blast of air through a process called air carbon arcing. A stainless steel filler that is harder and corrosion resistant is welded into place and then ground to create a smooth surface repairing the cavitated area. Right: The shiny areas show where previous cavitation repairs have been made. The yellow areas show new areas of cavitation that will be repaired during this maintenance period. Photos by Maj. Erik Karstensen, Assistant District Planner.

Project continued on page 17

By KEVIN QUINN, *Public Affairs Specialist*

Real Estate Division—the few who do so much

Editor's Note: One of the Commander's Top Ten goals last year was to clarify the mission of the Real Estate Division to public, stakeholders, political leaders, and, yes, even the Omaha District workforce. So Omaha Outlook took a few moments to question new Real Estate Chief David Chipman, who answered questions as well as provided his description of the Real Estate Division and its mission. It is nowhere near headlines on most days, but it's also never quiet in this division, which hums along efficiently, functioning smoothly in a chaotic world.

OMAHA OUTLOOK: What does the average taxpayer have to thank you and Real Estate for?

DAVID CHIPMAN: I've only been on the job for about two months, so I am not yet sure how to completely answer that one…but we have hundreds of thousands of real estate files, so I know we have definitely accomplished something noteworthy over the last 80 years. In all seriousness, I think the taxpayer should be thankful that this organization is dedicated to providing real estate support for Army and Air Force installations, many Army Reserve centers, several National Guard facilities, and expertly managing the real property needs at our District's civil works project sites.

OO: The Real Estate Division operates quietly on its own…what are three things to shout about in your division?

DC: On the top of my list would be that we have several people in the organization who are recognized as the best at what they do. For instance, John Whalley, is nationally recognized as an expert in our recruiting program, doing such things as authoring the original construction specifications for leased-space recruiting facilities build-outs. And the recruiting program isn't even John's primary mission. Another example is Roger Miller, who gets flown around the country to train personnel on how to do real property inventories as a real property officer. Yet another example is Rick Noel, our Civil Branch Chief. It would be safe to say that no single person in the Corps has more knowledge about real estate matters than him. I would encourage you to go ahead and test my theory on Rick.

New Real Estate Chief Dave Chipman: "Collaboration is our future." Photo by Kevin Quinn.

We have a really outstanding and productive team of real estate professionals in our DoD Recruiting Facilities Program led by senior realty specialist Brandi Lamb. In Fiscal Year 2013 alone, Real Estate executed 235 leasing actions for more than $12.4 million in support of the DoD Recruiting Facilities Program in an 8-state region.

Finally, the Omaha District recently became one of the nation's lead real estate components of the Non-Department of Defense Non-Operational Defense Sites program. The District, through the efforts of Jesse Otterson, our GIS cartographer, and Whalley, were tasked with providing rights of entry oversight with the execution being performed by the 16 USACE military districts throughout the country. Whalley and Otterson created a Web-Mapping database application that proved to

be user-friendly with a small learning curve. Thanks to this collaboration, the Omaha District proved to be highly successful in managing the initial site investigation phase of the NDNODS work that allowed users throughout the nation to track and have all records of ROEs and supporting documents at their fingertips. Moreover, given the proven success of our team, we are now being tasked with managing the ROEs for the remedial investigation phase of the NDNODS program for the next five years. We hope these collaborations are the future of our organization and continue to designate Omaha's Real Estate Division as a national leader in real estate.

OO: You are the brand new Chief of Real Estate. What's on your agenda for the first year?

DC: One of the first things on my agenda is re-organizing the talent and finding new talent to fill in the voids. Technology, like most fields, has changed how we do business. The Real Estate Division has gone from a high of 104 employees in the 1980s down to 47 employees today. So, early on, I spent a bit of time figuring out how to restructure our organization and who to smartly hire so we can continue as an organization in providing top-notch real estate services to our clients in the District, Army, DoD and other federal agencies. My first objective, however, is to spend a lot of time learning about all the various and diverse missions we have in Real Estate and getting to know the outstanding personnel I have the good fortune of leading. Overall, we are an outstanding group with a great deal of experience and a high-level of institutional knowledge, but I still see my position as continually trying to find ways we can be better.

Real Estate Division at a glance

The Omaha District Real Estate Division consists of 47 real estate professionals providing a full range of real estate services for the military and civil works activities of the U.S. Army, Department of Defense, U.S. Air Force, and other federal agencies as requested.

Real Estate's new chief oversees a team of employees ready to tackle the many challenges that go into managing a nine-state area where the Division provides real estate support for 12 active duty Army and Air Force installations, 66 Army Reserve centers, several National Guard facilities, and all of the district's civil works project sites.

The Real Estate Division is currently divided into three branches: Civil, Military, and Technical Support. The Civil mission, led by Rick Noel, has two primary focuses, which are providing real property support to the Operations Division and special projects. The Civil Branch creates and manages all leases at the District's civil works sites, including recreational leases, wildlife licenses, and agricultural leasing. To better serve the District's Operations Division, Real Estate has a four-person office located in Riverdale, N.D., to primarily serve the civil works project sites located in Montana, North Dakota and South Dakota.

At present, the Civil Branch is selling 392 cabin sites at the Ft. Peck Project pursuant to special legislation, where Real Estate has collected more than $9 million in sales. Most of those proceeds go to support the Charles M. Russell National Wildlife Refuge in Montana.

Another major project undertaken by the Civil Branch is managing and acquiring lands in support of the Missouri River Recovery Program. The MRRP was created by special legislation and designed to replace lost habitat resulting from the Corps' projects on the Missouri River through the development of emergent sandbar habitat, shallow water habitat, and wetland and terrestrial habitat. From FY07 to the present, NWO Real Estate has acquired 10,299.45 acres for $31.3 million in support of the MRRP mission.

Real Estate also lends its expertise to the District in assisting District planners with Project Partnership Agreements with non-Federal sponsors for the construction of water resource projects, to ensure that the non-federal sponsor has acquired the necessary real property interest to support the project. The Civil Branch also provides real estate support as needed to other federal agencies, such as the EPA, Department of Energy, and U.S. Customs and Border Patrol. For example, the Omaha District assists the DOE in acquiring lands under the Uranium Mill Tailings Radiation Control Act.

Real Estate continued on page 13

By KEVIN QUINN, *Public Affairs Specialist*

Upah paying the price of becoming a leader

In the "year of the front line leader," Cindy Upah will put on countless air miles, burn the candle mercilessly at both ends and register class, study and work time like never before as her three children and husband cheer her on... The price of self development and leadership is great, but that is what Upah's "wonderful opportunity" is all about.

Upah, who has been with the district nearly six years, was specifically chosen to participate in the Planning Associates Program for 2014, and her prior participation in the district's Leadership Development Program was a factor in that selection. Upah explained the thrill and excitement she was feeling from that selection.

"It was an honor to be selected and I am still excited about it several months into the program," she says on a recent call from Washington D.C.

An Environmental Resources Specialist for the Environmental Resources and Missouri River Recovery Program Plan Formulation Section, Planning Branch, Upah relishes the chance to grow. Her voice is excited when she says "We are into the Washington D.C. experience now, but we started in November with orientation and team building and followed that up with a trip to Jacksonville, Fla. to study Planning Foundations, the 6-step planning process, and civil works transformation, including planning modernization (SMART Planning)."

Later, she went to Mobile, Ala. to study deep draft navigation, "which is an opportunity we don't get here in Nebraska," Upah joked. That same trip took her to New Orleans to study post Katrina closure structures and pumping sites. She then went to Vicksburg, Miss. where she toured the USACE Engineer, Research and Design Center (ERDC).

"It's been fascinating at this level," [in Washington DC] she said. "We got to take part in a civil works review board and we met with the Headquarters leadership. We visited Capitol Hill. We also met with our Regional Integration Team members who liaison between Divisions and HQ ."

Her great finding: "The nexxus of the D.C. experience is that we get to see how policies formulate and grow from their roots. And we see how the Corps works for the country to implement

Cindy Upah is honored to be in Planning Associates Program. "You have to be flexible to make it work." U.S. Army Photo.

that policy through a perspective of leadership. The whole process opened my eyes," she said.

"Also, putting faces to names is nice—even vital. We met the vertical teams with whom we'll be working to implement policy and I think knowing them will be most helpful. This training has immediately increased my understanding of how the Corps works and our relationships with Congress, Office of Management and Budget, Assistant Secretary of the Army for Civil Works, and the Center for Environmental Quality. It has also helped me with understanding the internal processes between Headquarters, MSC's, districts and others. I am learning more about budget and programs, as well as specific business lines that I would not normally deal with, such as deep draft navigation. I have realized how much the Corps touches, and how many opportunities we have. The knowledge adds value at the District, MSC and national levels that I can apply immediately.

Competitively selected by Corps Headquarters Upah says the primary goal of the PA Program is to broaden the competencies of high potential journeyman planners who will lead complex planning studies and provide water resources technical and professional leadership in the future.

The PA Program provides quality, intensive training in Corps Civil Works Planning and leadership development. The curriculum is rigorous and comprehensive and covers team building and team leadership training; experiential training in USACE Civil Works business programs; case studies, individual and group projects and activities; communications and presentation techniques; and networking opportunities with leaders in districts, MSCs, headquarters and other Army, administration, congressional, and public and private water resource interest groups.

Some 20 courses are delivered in 1-3 week temporary duty periods spread over 11 months. This is a challenging program requiring stamina and flexibility by the participants, their families, and their home office staff. The PA travel periods are long and rigorous, often going more than 12 hours a day. They may require weekend work during the multiple week sessions. Meanwhile, the PAs are also working on their required individual and team products.

"Yes, I am still the planning lead for the Emergent Sandbar Habitat Program, part of the Missouri River Recovery Program, project manager for the ESH Reservoir Habitat Study, and the NEPA specialist on the Dam Safety Modification Dam Study for Cherry Creek."

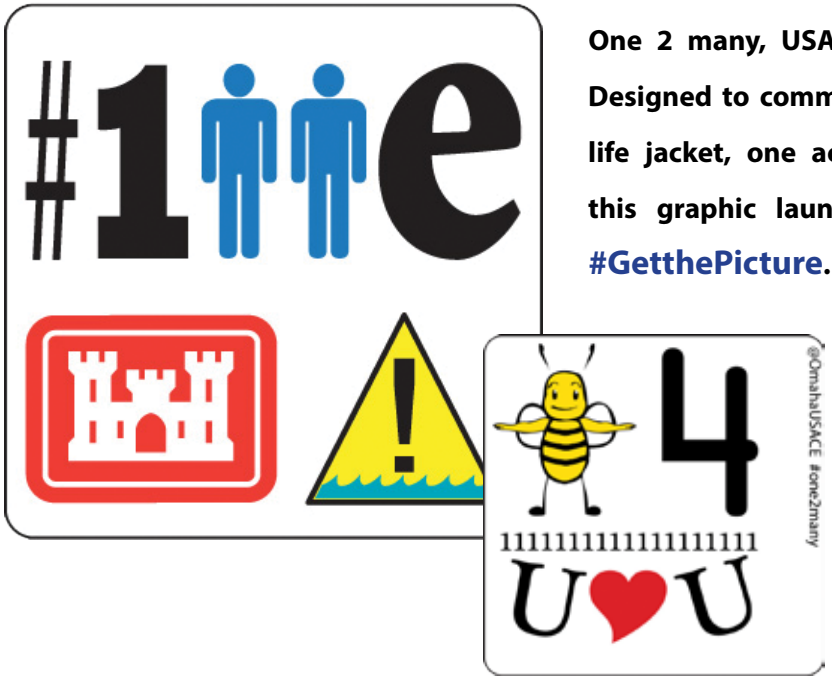
A wife and mother of three children (and den mother!) lays it on the line.

"To be truthful, you try to but may never strike a perfect balance," in meeting all requirements at home, office and in the PA program. "I just remain flexible for the road trips and the 50 percent of the time when I am home. I am already balancing the family life so I have a little experience with that. But it's hard to be perfect between work, travel and home so you have to roll with the flow and use every bit of ingenuity - you have to make it work.

"It takes some determination, I guess...

Upah's final thought is about the people she met. "One thing I cherish most about the program, is the fact that had I not been selected for this training, I would probably have never interacted with the other nine Corps employees chosen for the program from across the nation...I'll be in touch with them often in my career. I have learned so much from the courses, the experiences and the people around me."

Can you read this picture?



One 2 many, USACE Water Safety—or #One2many. Designed to communicate that one death, one unworn life jacket, one accident is too many. On January 7, this graphic launched a year-long campaign called #GetthePicture. To help the public get the picture about water safety, the puzzles, which communicate a water or recreational safety message, will appear each week on our Facebook page. A special puzzle for Valentine's Day, "Be safe for the ones you love" (left inset).

By BRIAN KING, *AIA, Project Architect/COR*

LVIS left quite the building

"The LVIS project is a great success story—on time, within budget and it's a great-looking facility," says Peter Sturdivant, resident engineer at the U.S. Air Force Academy and Schriever Air Force Base, both in Colorado Springs, Colo.

The $13.4-million Large Vehicle Inspection Station just outside of the security perimeter of the U.S. Air Force Academy was designed and constructed as an upgrade to the existing access control point at the South Gate to meet the latest Unified Facilities Criteria standards.

A military construction project from 2012, the LVIS is adjacent to the intersection of Kettle Lake Road and South Gate Boulevard. Its location north of the academy's South Gate provides the Air Force with an operational, permanent and enclosed inspection facility for commercial vehicles 24 hours, seven days a week.

"Since this area of the academy has seen little development it was very important to the U.S. Air Force to work with their master plan and develop the site to reinforce a South Gate Campus feel," says Project Architect Brian King, American Institute of Architects.

The inspection facility is required as part of UFC 4-022-01. The project began with a request for proposal developed by Omaha District as a Design Build RFP. The first design charette was in late 2010 and the facility was completed November 2013.

The South Gate is designated as the commercial vehicle point of access and is readily accessible to commercial traffic via Interstate 25 and North Academy Boulevard.

Minimizing the visual impact of an industrial facility at one of the primary entrances to the Academy is an important component of the site and facility design. All vertical construction was designed to follow the U.S. Air Force Academy's international architecture style based on a 7-foot grid pattern.

A strong architectural relationship was maintained to the adjacent Pass/ID Building in order to strengthen the "campus" setting, and further follow

Photo by Harry E. Weddington.

and reinforce the design parameters of the U.S. Air Force guidelines. The project is placed on the site as a "mirror image" of the Pass/ID Building, and also duplicates existing landscape features like the courtyard to the east in order to strengthen this relationship.

The LVIS facility was constructed to provide administrative and indoor inspection capabilities for the inspection of commercial vehicles entering the U.S. Air Force Academy every hour of every day.

The LVIS consists of 9,054 gross square feet for the inspection of commercial vehicles and administration support functions. Its maximum programmed allowable area was 9,687.5 GSF. The facility allows the Air Force to utilize the South Gate for all commercial traffic while preserving the North Gate as the entrance for visitors and base personnel.

The facility will allow traffic to move more freely by separating commercial traffic from the privately owned vehicles and providing security personnel a dedicated and ideal environment to process commercial vehicles in an efficient, thorough manner.

"The ability to meet the facility's programmatic functions while architecturally complimenting the existing structures such as the adjacent Pass/ID building and providing a cohesive campus setting at the South Gate, was the primary goal of the Air Force," King said.

Construction of the LVIS met the minimum standards required to meet Leadership in Energy and Environmental Design Silver certification, he added.

The project was contracted as a design-build to provide design and construction of a steel and/or concrete masonry unit structure that includes indoor inspection and administrative areas, circulation roads, privately owned vehicle parking area, vehicle over watch, modifications to the existing public road for safe, efficient access into the facility and general site improvements to support the facility.

By CHERYL A. MOORE, *Public Affairs Specialist*

Stakeholders join District personnel in critical training

The 2014 annual spring Flood Fight Training for Omaha District was held February 27 at the Missouri River Project Office. The bitterly cold day included a morning session for more than 90 district employees, while the afternoon session was geared toward District stakeholders, county emergency management teams, state emergency management teams and local levee sponsors.

Leading the charge was Ryan Buckley, Readiness Branch PL-84-99 Inspection Program Manager. Buckley discussed Readiness Branch authorities and Emergency Operation Center operations. He also defined Public Law 84-99 and Stafford Act. Additionally the morning session included a discussion on deployment procedures and equipment check out, geared toward the internal audience.

"Public Law 84-99, commonly referred to as PL 84-99, allows USACE to provide emergency flood fight assistance during flood events. The assistance is supplemental to state, tribal, and local efforts and temporary in nature to meet the immediate situation," Buckley said.

He also stated that the proper procedure is to request assistance through the local, county, and then state emergency management offices. The tribes may come directly to USACE. State, tribal and local interest must commit all available resources such as the workforce, supplies, equipment, funds and National Guard assets, as a general condition of USACE assistance.

Buckley also said, "The emergency efforts provided by us are not intended to give permanent solutions to flood problems, but are provided strictly as a temporary risk reduction measure for critical protection of public facilities and infrastructure."

The Stafford Act is a 1988 amended version of the Disaster Relief Act of 1974, a system where a presidential disaster declaration triggers financial and physical assistance through the Federal Emergency Management Agency. The Act gives FEMA the responsibility for coordinating government-wide relief efforts.

"Holding annual flood fight training keeps us proactively prepared for when an event happens," said Buckley. The Omaha District Readiness Branch maintains a wide variety of flood fight supplies with the ability to receive additional equipment very quickly through plentiful resources across the nation.

Buckley also noted that USACE only provides technical assistance and cannot participate in or provide support for ice jam blasting. "We continue

Chuck McWilliams, Meteorologist, presents an outlook on current and forecast weather conditions during the 2014 annual Flood Fight Training held February 27 at the Missouri River Project Office. Photo by Cheryl A. Moore.

monitoring for ice jams and potential flooding," he said.

The 2014 Flood Outlook was presented by Chuck McWilliams, Meteorologist. "Only isolated reports of minor ice-jam flooding so far," McWilliams said. He compared the upcoming season to the previous seasons through information provided by the National Weather Service.

Don Moses, Civil Engineer, discussed common failure modes along with the importance of surveillance and inspection of levees. "Common to all levees is low spots created by traffic," Moses said. Low spots may also be created as the levee foundation settles. He pointed out that sand levees are not resistant to overtopping, saying clay levees are more resistant to overtopping but will eventually fail with sustained overtopping.

"Safety first" was the main message conveyed by Moses as he spoke about flood surveillance and inspections. "Don't put yourself in an unsafe situation," he said. "Know your evacuation routes." It's also good to know the situation by finding out who owns and operates the structure. As McWilliams reminded everyone in attendance, know the current and forecast flood situation. "But most importantly," said Moses, "Be prepared and have the right equipment."

Joe McMahan, Deputy Regulatory Branch Chief, spoke of the different types of permits required during flood fighting and stated that some flood-related work activities do not require a Department of the Army permit. "Many permits require notification prior to the work being done," said McMahan. He also emphasized that there are no blanket permits for any work performed in waters of the U.S. The authorization/permits used are Nationwide Permits, Regional General Permits, Standard Permits and Emergency Procedures.

Nationwide permits authorize the discharge of fill material in waters of the U.S. (including wetlands) that will result in minimal impacts to the environment. McMahan noted that common NWPs used during and after flood events include NWP #3-Maintenance, NWP #12-Utility Line Activities, NWP #13-Bank Stabilization and NWP #45-Repair of Uplands damaged by discrete events.

The Omaha District's Public Affairs Office plays a vital role before, during and after a flood. Eileen Williamson, Public Affairs Specialist reminded district employees that if you are approached by the media and are asked a question you don't have the answer to, it's okay to say you don't know. Her "key" message to the group was, be yourself, be honest, be prepared, be knowledgeable, be comfortable and be brief.

"We work with the media because there is a story to tell," Williamson said. "We want and need to tell the USACE story."

The 90 or more district employees in attendance at this year's flood fight training are now ready to handle their next assignment, should the need arise.

A lot of the same information was shared with the external stakeholders during the afternoon session. Additional presentations included nonstructural alternatives, Missouri River Basin update and the Silver Jackets Nebraska Risk Communication website.

Mike Swenson, Power Production Team Leader for the Northwestern Division's Missouri River Basin Water Management Division, highlighted the 2014 Reservoir Operations stating that the runoff forecast is 26.7 Million Acre Feet (106 percent of normal). "Runoff expected to be above normal even if precipitation is normal due to wet soil moisture in fall," Swenson said. "Mountain snowpack is currently 115 percent and 122 percent of normal and plains snowpack in the localized areas is light to moderate," he continued. Swenson also stated that drought conservation measures continue to be implemented with reduced navigation support and minimum winter releases.

The Northwestern Division hosts monthly calls with Congressional delegations, tribes, state and local officials and media, which resumed in January and will continue each month through June. Swenson reminded the stakeholders about meetings set for April 8-10 in Kansas City, Kan., Nebraska City, Neb., Pierre, S.D., Bismarck, N.D., and Fort Peck, Mont.

Randall Behm, Chief of Flood Risk and Floodplain Management Section, and also Chair of the USACE national Nonstructural Flood Proofing Committee, informed the stakeholders about Nonstructural Flood Risk Management Measures. "Nonstructural flood risk management measures are proven methods and techniques for reducing flood risk and flood damages by adapting to the characteristics of flooding incurred within the floodplain," Behm said.

From 2005 through 2013 the nation has endured the likes of Hurricane Sandy, Hurricane Katrina,

Missouri River flooding and Colorado flooding with annual costs ranging from $38 billion-$54 billion, posing the question, "Is this the new norm?," asks Behm.

"Effective and continuous collaboration between state and federal agencies is critical to successfully reducing the risk of flooding and other natural disasters in the United States enhancing response and recovery efforts when such events do occur," Behm said.

"No single agency has all the answers, but often multiple programs can be leveraged to provide a cohesive solution," he said.

Pulling it all together is the Silver Jackets, an innovative program providing an opportunity to consistently bring together multiple federal, state and sometimes local agencies to learn from one another and apply that knowledge to reduce risk.

Tony Krause, Hydraulic Engineer, communicated to the external stakeholders the importance of risk communication and the tools available to help communicate with each of their communities.

"The objective is to build resiliency through risk informed decisions," he said. He also gave an example of four types of risk treatments; reduce/mitigate, offset/transfer, accept or live with the risk, and finally avoid it by just moving out of the flood risk.

Risk communication is the tool used for all risk treatments. With so many people, ways, styles, messages, miscommunication, the Silver Jackets takes the information from all involved sources, tailors it into an organized message, gathers the feedback, uses the tools and resources and gives it to the receiver to take action.

The actions taken in the annual Flood Fight Training provide district personnel who have taken it before a refresher, while new employees and stakeholders hear the information for the first time. "We want to be prepared to provide immediate and effective response and assistance prior to, during, and after emergencies and disasters," said Buckley.

He also said providing this information to our stakeholders creates a better understanding of our authorities and how the procedures and process may assist them, as demonstrated through training topics, which help reduce risk to the communities or their flood risk reduction project.

"We want to ensure that all personnel assigned emergency assistance responsibilities within the Omaha District are properly trained to accomplish these responsibilities," said Buckley. "Proactive not reactive," he emphasized.

Flood Fight Training takes place annually, before the start of flood season. "The information is fresh in everyone's mind," Buckley concluded.

Don Moses and Jody Ruckman were among the more than 90 Omaha District employees who attended the 2014 annual Flood Fight Training held February 27 at the Missouri River Project Office. Photo by Cheryl A. Moore.

Real Estate continued from p.5

The largest branch in Real Estate is the Military Branch, which is led by Sue Goding. Besides providing support to military installations and facilities, the Real Estate Division provides support for the Joint Recruiting Facilities and Lease Government Housing within the District's geographical footprint. In FY13 alone, Real Estate executed 235 leasing actions for more than $12.4 million in support of the DoD Recruiting Facilities Program in an 8-state region. Under the Lease Government Housing Program, providing residential housing to remotely located service members and their families, the Real Estate Division maintains more than 100 leases expending more than $750,000 in FY13.

The Military Branch also manages several military facilities that were closed and disposed of under the Base Realignment and Closure Act (BRAC), such as the former Fitzsimmons Army Medical Center. The division also works closely with the district's Environmental Branch to obtain hundreds of rights-of-entry to former Department of Defense sites so that the District can do environmental testing and perform environmental remediation if necessary.

Finally, the Technical Services Branch led by Nick Moustakes provides appraisal services through its staff of four appraisers, maintains thousands of real property audit files as required by regulations, maintains inventory of real property throughout the District by its nationally recognized real property officer Roger Miller, accounts for funding through two staff program analysts, and provides project mapping support through its cartographers.

The Technical Services Branch has interfaces with all of the various disciplines within the Real Estate Division. For example, cartographer Jesse Otterson, along with Senior Realty Specialist John Whalley, have put the Real Estate Division at the forefront of database technology when it was tasked to lead the Nation's program in obtaining rights-of-entry (ROEs) at over 400 sites located in 46 states and two territories at formerly used Army National Guard training areas that were not DoD owned. This program, mentioned earlier, is NDNODS.

Moreover, to the Real Estate Division's success in creating and applying this NDNODS database program, the Omaha District is tasked with providing cradle to grave oversight of all real estate activities for the Remedial Investigation phase of the NDNODS program for the next five years. It is the desire of the Real Estate Division to continue to expand the technology developed by Otterson and Whalley to other national programs within the federal real estate community.

By CHERYL A. MOORE, *Public Affairs Specialist*

Preserving the past to accommodate the future

If you have been in the military or around military bases, you have probably heard or have seen for yourself how living spaces at most Air Force bases have a great quality of life appeal to them. The quality of work put into these accommodations, across the globe, make way for some of the better quality of life experiences in the Armed Forces.

Dormitory 236 at F. E. Warren Air Force Base, Wyo. is one example of the great quality of life afforded to military members stationed there. Renovation of this dorm was a project performed by an in-house design team from the Omaha District.

The design for Dorm 236 began in the fall of 2007 and construction was completed in the winter of 2010. The in-house design team included; Michael Morrison, Architectural Design; Jeff Tessin, Civil Engineering; Maria Luckey, Interior Design; Douglas Meier, Structural Design; Tim Welsh and Galen Rejda, Mechanic Engineering; John Sawick and Jim Lowe, Electrical; Brian Nohr, LEED Coordinator; and Michael Pisci, Project Manager.

Dorm 236 was one of three facility designs earning top honors in the Air Force Design Awards competition. Dorm 236 exceeded Air Force Leadership in Energy and Environmental Design Silver requirements without additional cost, attaining certified LEED Gold with 41 credits while being very energy efficient. LEED is a green building tool that addresses the entire building lifecycle recognizing best-in-class building strategies.

Built in 1908, and listed on the National Register of Historic Places, Dorm 236 is a part of the heritage of F. E. Warren Air Force Base. The base is the oldest continuously active military installation in the Air Force, and Dorm 236 is just one of more than 220 red brick buildings constructed on base from 1885 through 1930 and similar aesthetically to the red brick buildings located at Offutt Air Force Base, Bellevue, Neb.

"Dorm 236 renovation is an excellent example of a project that successfully balances historic preservation and the modern needs of Air Force living quarters," said Nohr. Part of the design submittal pointed out that Dorm 236 needed to be updated to current Air Force dormitory standards, while also repairing and replacing materials due to the normal wear and tear of use and weather infiltration from small areas of roof failure.

The Omaha District team performed a complete demolition and reconfiguration of the interior. Because this is a registered historic building, the building's exterior had to be preserved while complying with the State Historic Preservation Office standards. "A significant challenge was to replace the existing two-person dorm units with four-person units," said Meier. "Creative design work such as using existing doors as windows for dorm rooms, and consultation with the owner produced a design that met the needs of both historic preservation and functionality."

Morrison explained how architectural compatibility was maintained with other surrounding facilities on the installation. "By salvaging the existing shell and redesigning the interior to comply with current standards, Dorm 236 inherently incorporates the concepts of reuse and reconfiguration," Morrison said. "The exterior was repaired and finishes replaced with salvaged materials, windows and doors were replaced with energy efficient units that matched the façade, and two pairs of historic doors were reused in place as windows, instead of being removed."

Sustainability was achieved in this project through the reuse of 96 percent of the exterior shell and floors. "Dorm 236 project diverted 253 tons of waste, 55 percent of all construction

Opposite: The exterior of Dorm 236 at F. E. Warren Air Force Base, Wyo, maintains its historical value following a complete renovation of the interior of the building.
Above: A typical single-occupancy room at Dorm 236 provides the comforts of home to military members stationed away from home. Photos by Harry Weddington.

waste, which is exceptional for this remote location," Pisci said. The contractor developed a construction waste management plan prior to construction and trained sub-contractors in its use. "Materials such as clean wood, concrete, all metals, cardboard, and plumbing fixtures were set aside to be sent to salvagers/ recyclers," Pisci said.

Dorm 236 made an excellent use of its funding compared to the programmed amount for the project and the actual construction cost to complete this project. The programmed amount was $8.5 million, and the renovated dorm had a final cost of $7,278,923. "One reason for this was that several other dorm renovation projects had been completed by local contractors just prior to this contract, which gave them valuable experience and allowed bidding to be extremely competitive," said Pisci. He pointed out that the project's interior finishes were designed to be durable, attractive, and low cost.

The design philosophy made an effective use of available funds and allowed for a low overall cost, while the Omaha District Design team helped bring new life to Dorm 236, inside and out and into the future.

Top: Outside the doors of the private living quarters military members have access to a living room, kitchen and dining area, along with laundry facilities.
Center: Occupants of Dorm 236 can stay in and enjoy the comforts of the living room and cook in the kitchen and dining area.
Bottom: A renovated dorm room in Building 236 provides comfort and privacy for its occupants. Photos by Harry Weddington.

Project continued from p.3

Left: Project crew members, Cody Wilken and Dale Stibral carry a piece of the scaffolding platform for installation in the draft tube. Right: Mike Welch, Gavins Point Power Plant Superintendent, welcomes members of the Yankton, S.D. fire rescue team to the project. Should an accident occur while work is taking place at the project, the Yankton Fire Department may be among some of the first responders on scene. Welch invited the crew to see what access to the draft tube would be like if they ever needed to perform a rescue. Photos by Eileen Williamson, Public Affairs Specialist

"We are watching the scaffolding placement from different perspectives by using still photos and video cameras to record the work taking place inside the draft tube as well as having District experts evaluate the scaffolding structure and the team's safety practices," Welch added.

The hydropower mechanic career field is a unique one with its own learning curve and among the project team members is Dale Stibral, a rehired annuitant, who retired after 35 years as the Senior Mechanic at Gavins Point.

"Bringing Dale back has been an asset on a number of different levels because each plant has its own special operating or maintenance needs or history. There are some things a person may only see once or twice in a career and he has that history and background," said Neumann. "Dale knows where things are and when we ask for something, he knows what we need and where to find it. Together he and I can provide mentoring and training for the rest of the crew to prepare them for additional responsibilities in the future."

Structural engineers and District safety personnel traveled to Gavins Point from the Omaha District to watch the project crew place the scaffolding and determine if there were any recommendations for improving safety.

"The scaffolding is well made and quite sturdy," said Sean Denning a structural engineer from Omaha. "This is the first maintenance platform we're evaluating with the new safety criteria, so we'll use what we learn from Gavins Point to assess scaffolding at the other main stem dams."

Annette Fowler, a safety specialist from the Omaha District was also on hand. She was also looking for ways to improve worker safety for the operation.

New requirements for Turbine Maintenance Platform safety are currently in draft status and scheduled for publication this spring. The Omaha District Operations Division, which oversees project operations at the six main stem dams along the Missouri River, is proactively evaluating current processes and equipment against the forthcoming requirements.

"The project provided an excellent opportunity for me to observe the installation process and to compare it to the new Turbine Maintenance Platform safety requirements," said Fowler. "Installing the platforms and scaffolding can expose personnel to hazardous falls. Among my observation goals was to focus on fall hazards and providing methods to improve fall protection systems."

Cavitation repairs in the draft tube for unit three concluded in mid-March.

Additional maintenance and rehabilitation projects are also underway at the Gavins Point project including replacing three power transformers and rehabilitating the spillway's tainter gates. Work will move to unit two for annual generator maintenance, to install new un-watering and drain valves, to install a new motor control center, and replace switchgear equipment.

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The Omaha District celebrated it's 80th birthday with an Irish Pub Night. Made some folks very merry and made one leprechaun think…let's do it again. Photos by Harry E. Weddington