

ENGINEER UPDATE

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New CG sets priorities for Corps of Engineers

By Tesia Williams Headquarters

Lt. Gen. Thomas Bostick became the 53rd commanding general of the U.S. Army Corps of Engineers and chief of engineers during an assumption of command ceremony May 22 at Baruch Auditorium on Fort Lesley J. McNair in Washington, D.C. Army Vice Chief of Staff Gen. Lloyd J. Austin III hosted the event.

"I absolutely believe Lt. Gen. Bostick is the right person to lead the Army Corps of Engineers," Austin said during his remarks. "He is one of the smartest, most gifted general officers of our time, with the ability to do well and thrive in any environment."

At USACE, Bostick serves as the senior military officer overseeing most of the nation's civil works infrastructure and military construction. He is responsible for more than 37,000 civilian employees and 600 military personnel who provide project management and construction support to 250 Army and Air Force installations in more than 100 countries around the world.

Bostick also oversees the Corps' diverse missions such as hundreds of environmental protection projects; the regulatory permit program to protect, restore and enhance thousands of acres of wetlands; support to warfighters in Iraq and Afghanistan; and the emergency response mission to support the Federal Emergency Management Agency.

In addition, as the chief of engineers, Bostick advises the Army on engineering matters and serves as the Army's topographer and the proponent for real estate and other related engineering programs.

"Now, more than ever, the nation needs a lean, agile, strong, capable, competent and trusted Corps of Engineers," Bostick said. "One that serves the Army and nation; and one that truly teams with our many military, federal, state, local government, host nation governments, tribal, academia, industry and nongovernment partners to solve the engineering and scientific challenges facing the joint force, the nation and the global community.

"I'm committed to working with all our partners to continue the rich traditions of the Corps, meet the needs of this country and always deliver," he added.

Bostick graduated from the U.S. Military Academy at West Point in 1978 with a Bachelor of Science degree. He holds a master's in civil engineering and mechanical engineering from Stanford University, and is a graduate of the U.S. Army War College. He is a registered professional engineer in Virginia.



Photo by F.T. Eyre, ACE-IT

Lt. Gen. Thomas Bostick is the 53rd commanding general of the U.S. Army Corps of Engineers.

Lt. Gen. Bostick's Priorities

- 1. Support Central Command in winning the current fight and deliver the International Security Assistance Force and ambassador team programs in Afghanistan.
- 2. Support the other combatant commanders' security activities across the globe in support of the Chairman of the Joint Chief of Staff's Strategic Direction for the Joint Force.
- 3. Support the Army and the nation in achieving their energy security and sustainability goals to reduce energy dependence, increase energy efficiency and adopt renewable and alternative energy sources.
- 4. Address our aging military and civil works infrastructure in this environment of evolving budgetary constraints and declining resources.
- 5. By the end of 2012, develop a Vision and Implementation Plan for achieving USACE 2020 that is nested with (or complements) Army 2020.
- 6. Streamline USACE business and governance processes.
- 7. Work with the administration, Congress and our internal team to refine the civil works budgeting process.
- 8. Build great people and strong teams by encouraging leader development programs and initiatives.
- 9. Strengthen and further teamwork with the Joint Engineer Force.
- 10. Enhance our interagency disaster response and recovery capability.

Insights

Constitution guarantees freedom of religion

By Col. Brent Causey Chaplain, U.S. Army Corps of Engineers

One of the boldest monuments in Washington, D.C., is about a 10-minute walk from our office building. At the Newseum facing Constitution Ave., the First Amendment to the Constitution of the United States is carved on a slab of Tennessee granite 70 feet tall. That amendment guarantees five freedoms:

"Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the Government for a redress of grievances."

That seems straightforward and unambiguous, but in my career as an Army chaplain I have seen many different interpretations of the statement, "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof". So in this month of our nation's birthday, I recommend that we take a closer look at our guarantee of religious liberty and what it really means.

I have heard the phrase "separation of church and state" attributed to the First Amendment of the Bill of Rights. However, if you research this phrase you will discover the true origin comes from a letter that President Thomas Jefferson wrote in 1802 to the Danbury Baptist Association in response to their inquiry on October 1801 about religious freedom.

On Jan. 1, 1802, Jefferson wrote a letter to them in which he added the phrase "separation of church and state." When you read the full letter, it is clear that Jefferson was simply underscoring the First Amendment as a guardian of the peoples' freedom from government interference in their religious practices. Here is an excerpt from Jefferson's letter:

"I contemplate with sovereign reverence that act of the whole American people which declared that their legislature should 'make no law respecting an establishment of religion, or prohibiting the free exercise thereof,' thus building a wall of separation between church and State."

Jefferson simply quotes the First Amendment, and then uses the metaphor of "a wall" to separate the government from interfering with religious practice.

Notice that the First Amendment puts restrictions only on the government, *not* the people. But I have heard others interpret the First Amendment as restricting religious freedom, and consider the expression of religion outside the walls of a religious institution an offense to their personal rights.

But the truth is that the First Amendment *guarantees* religious freedom and expression. The government's role is to ensure those rights. If we don't, the U.S. risks becoming like so many countries where we have sent military personnel to protect people from religious persecution.

The U.S. State Department monitors religious freedom worldwide. They report to Congress and the president about nations that forbid diverse and open expression of religious faith, which is a violation of the International Religious Freedom Act of 1998. Secretary of State Hillary Rodham Clinton has stated that:

"Religious freedom provides a cornerstone for every healthy society. It empowers faith-based service. It fosters tolerance and respect among different communities. And it allows nations that uphold it to become more stable, secure and prosperous."

Military chaplains are one element of this defense of religious freedom in the U.S. The chaplain is the religious officer for his or her command. The Resolution of July 29, 1775, adopted by the Continental Congress, established the legal foundations for the Corps of Chaplains.

Even though the White House has a military chaplain, and the House of Representatives and the Senate have chaplains, the right of the military to have chaplains was challenged in court, and in 1985 the 2nd U.S. Circuit Court of Appeals upheld the U.S. Army's chaplaincy.

Chaplains have multiple roles. One role is to perform their faith group's religious practices, which is mandated by U.S. Code Title 10. The second is to ensure that those whose faith is different from the chaplain's are equally provided for based upon the desire, needs and request of those individuals in the unit. Chaplains of all faiths and beliefs support all the spiritual needs of individuals in the unit; all the person has to do is ask (Army Regulation 165-1).

Under military regulations and the First Amendment, religious freedom and liberty is for all, whether it is to believe in a religion, a philosophy, or to have no belief at all. The existence of a chaplain is to ensure religious practices, not prevent them. This is the First Amendment in action ensuring freedom *of* religion, not freedom *from* religion.

It is our responsibility as Americans to support freedom and liberty for all. As an Army chaplain, I will fight for your rights to believe or not believe. To practice or not practice, to meet or not to meet, according to your beliefs. This is a right of all Americans, and as a country we try to support that right in other nations.

This July 4th will be the 236th anniversary of the Declaration of Independence. Let us put our words into action here in the U.S. Support the freedom of religion, and resist the temptation to deny our rights and freedoms as Americans.

(The opinions in this article are those of the author and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)

Top engineer knows strengths, limitations

By Kevin Quinn Omaha District

The greatest strength John Remus may possess is the recognition of his own limitations. That is why he is slow to take credit for being selected as the U.S. Army Corps of Engineers' Engineer of the Year

"The award is nice, and I'm honored to receive it, but in all truth it's a team accomplishment," said Remus, chief of Omaha District's Hydrologic Engineering Branch. "Everything I've ever accomplished has been because I've gotten help from others. For the flood of 2011, for example, an op-

portunity to serve presented itself and we worked hard and did well."

A 27-year veteran of USACE, Remus oversees engineering and scientific support to the district's water resources mission, including design of flood control, channel stabilization, environmental restoration and navigation projects throughout the upper Missouri River basin.

Hydrologic Engineering Branch is also responsible for the day-to-day operation of 26 tributary projects, and provides data collection and data base management support to Northwestern Division for operating six main stem Missouri River projects.

During his career, Remus has served as river engineer, project manager, section chief and branch chief.

The award nomination for Remus cites numerous accomplishments, the most obvious being his work during the historic Missouri River flood of 2011. But other significant accomplishments include reach-back work for Afghanistan projects and a myriad of planning studies.

Katie Schenck, chief of Operations Division, said she "cannot think of anyone who knows more about the Missouri River than John Remus. He has worked all aspects of the river and has the knowledge

to pull together past and present events that are essential to shape the future of the river."

"I came to depend on him as much as anyone during the flood of 2011," said Col. Robert Ruch, Omaha District commander. "He was there 24 hours a day and he knew so much."

Remus' reliability and work ethic came from humble but solid beginnings. He grew up in the North Platte, Neb. area and played three sports and three instruments in the marching band. His parents exhibited "great values. I understood that excel-

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Kristine Allaman is awarded distinguished civilian honor

By Bernard Tate Headquarters

There is a gallery honoring the Distinguished Civilian Employees of the U.S. Army Corps of Engineers outside the Executive Suite in Headquarters. On June 14, Kristine Allaman became the newest Distinguished Civilian Employee. She is the first female engineer and the third woman to have her photo placed on the wall.

Allaman was formally inducted into the Gallery of Distinguished Civilian Employees in a ceremony in the auditorium of the Government Accountability Office Building. Afterwards, Allaman and Lt. Gen. Thomas Bostick, USACE commanding general, hung her photo on the wall during the 10th Annual Engineer Regimental Muster Ceremony outside the Executive Suite.

Surprised

"I was completely surprised and thrilled with this selection," Allaman said. "It is such a great honor to begin with, and then to know that people remember you is even more wonderful. One of my strengths is strategic thinking, so it's especially gratifying to know my efforts have left a legacy for others to follow, just as I followed in the footsteps of earlier leaders and mentors in USACE."

Allaman retired June 3, 2008, after a 31-year career in civil service, 23 of those years with the U.S. Army Corps of Engineers. She was a member of the Senior Executive Service. SES members are equal in pay and responsibilities to military general officers.

Distinguished Civilian Employees are USACE retirees who had exemplary federal careers. According to Col. Dan Anninos, chief of staff, to be selected a person must have served at least five years at USACE Headquarters working for the commanding general, accomplished assigned duties in an outstanding manner, developed methods and procedures that produced extraordinary benefits, and contributed substantially to the reputation and honor of USACE.

Accomplishments

Among her many accomplishments, in 1992 Allaman was selected as the chief of the Engineering Division in Walla Walla District, becoming the first woman to lead



Photo by F.T. Eyre, ACE-IT

Kristine Allaman is the newest addition to the Distinguished Civilian Employee gallery.

a district engineering division. In 1995, she made history again when she became the Corps' first female engineer appointed to the SES. At that time, she was the director of Engineering and Technical Services in Missouri River Division.

In 2000 at USACE Headquarters, Allaman co-led initial efforts to develop the Readiness XXI plan that integrated the Corps' military and domestic emergency response capabilities. At retirement, she was Director of Installation Management, and Director of the Strategic Integration Directorate.

"Her most significant legacy will be the people that she mentored in USACE and

in the field of engineering and strategic planning," said Bostick during the ceremony that inducted Allaman into the Gallery of Distinguished Civilian Employees. "She was the champion for fully developing individual employees and technical competencies needed for USACE to deliver effective, innovative solutions for the nation on engineering challenges. She maintained a long-term focus on motivating the Corps and its people to become a learning organization created by learning individuals."

Most important

"I consider many of my physical accomplishments to have been of value," Allaman

said in her speech. "Managing and creating facilities and organizations to support our great Soldiers and airmen and their families; protecting people from flooding and helping in emergencies; improving prospects for endangered species; developing strategies to effectively deal with fast-paced change.

"However, my single most important accomplishment is to have encouraged people to understand themselves, their strengths, and develop these to fulfill their goals and be the best they can be," Allaman added. "The strength of the U.S. Army Corps of Engineers is in its people and how they work together to accomplish much more than any one of us could do alone. That is the best legacy that I or any leader can leave."

Allaman downplays the third woman aspect of the honor.

"In retrospect, women came into their own in the workforce following World War II," she said. "Those women led the way for the women's movement of the 1960s and beyond, leading to today when we have many women in the workforce who are talented, smart, educated and contributing greatly to the success of our mission. It is beneficial to our nation to use all of the talent of our population to contribute to the national good."

Allaman also doesn't think it will take long for the fourth woman to be added to the Gallery of Distinguished Civilian Employees.

"There are now more women in leadership positions than ever before, so I believe we will have more women honored in the near future," she said.

Retirement

Since retirement Allaman has spent a lot of time with her family, "which I could not do much while I was working." She moved to Arizona to be near her father, who is in his 90s. She is also a full-time caregiver for her husband.

"For creative interests, I've been redesigning and remodeling the old house we bought, taken some on-line courses, and do a bit of gardening, which is a challenge in the desert," Allaman said. "I also like to cook and try out new recipes, so I'm learning about foods and dishes here in the Southwest. I am still examining future possibilities, but at this time I am staying busy."





Photos courtesy of CSM Micheal Buxbaur

One of a command sergeant major's most important jobs is to visit the people in his command. Command Sgt. Maj. Micheal Buxbaum is the first to visit all USACE field sites. (Left) Buxbaum meets with USACE deployed employees in Afghanistan. (Right) Buxbaum meets with members of the crew of the dredge *Jadwin*.

'I am mission complete.'

Command Sgt. Maj. Buxbaum retires after 32 years

By Bernard Tate Headquarters

First, wrap your head around this image -- Command Sgt. Maj. Micheal Buxbaum riding off into the sunset on his motorcycle, hair blowing in the wind.

That's pretty close to what he plans to do when he retires. In August Buxbaum and his wife Roberta (Bobby) will ride to the West Coast and back on their Harley-Davidson Ultra Classic.

"That will be the first time in more than 30 years that I've let my hair grow longer than 10 days," said Buxbaum, former command sergeant major of the U.S. Army Corps of Engineers.

And there is a good chance that you might be able to imagine that scene because there is a good chance that you might have actually met Buxbaum. He is the first command sergeant major in USACE history to visit *all* of the Corps' field commands. All of the past command sergeants major have come close, but Buxbaum is the first to succeed.

There was a large map of USACE in Buxbaum's office that he is quite proud of. It bristles with map pins marking every place he has visited, and he has been to projects and talked to people in every division, district, lab and center of expertise, including Japan, Germany, Korea, Afghanistan and Iraq. He even scored Brazil and Israel.

That globe-trotting marathon "started because Lt. Gen. Van Antwerp gave me five taskers when I came on board," Buxbaum said. "The first was to take the pulse of the work force and see how they're doing."

The others were take care of the wage grade force, take care of the Forward Engineer Support Teams, and take care of USACE people in Afghanistan and Iraq. The fifth was to make sure that the Army and the Engineer Regiment understand what USACE is and what it does.

"Four of those five taskers are people oriented because that's what sergeants major do," Buxbaum said.

He quickly realized that the only way to carry out the commanding general's orders was to visit the field sites in person, which required about 200 days of travel each year.



Photo courtesy of Walla Walla District

Command Sgt. Maj. Micheal Buxbaum activates a turbine at Dworshak Dam in Walla Walla District.

He used the map in his office to keep track of all the places that he visited, and that travel gave Buxbaum an answer to the commanding general's engineers' number one tasker.

"Overall, I think we're better off today than we were four or five years ago," Buxbaum said. "Are there ripples out there? Yes, because every company has issues that you have to deal with. But I think in general folks are tracking. I think overall we're a healthy organization."

Part of that organizational health is a credit to Buxbaum. Any command sergeant major is another set of eyes and ears for the commander, and that makes "troubleshooter" part of his job description.

"This job is unique because you can talk to everyone from

the newest wage-grade employee to the most senior SES or general officer, and everybody in between," Buxbaum said. "My door was open for all of them, and a lot of people from all levels came to my office to bend my ear. And vice versa. I go to them and bend their ear. I've talked to almost all every section in Headquarters to answer questions.

"I tell everyone during my visits, 'I'm not an expert in any of these arenas, but I have direct access to those who are," Buxbaum said. "I could talk to the lawyers or human resources or resource management or G-3. Then I'll tell the field the answer. They may not like the answer, but it's from the source.

Continued on next page

Soldier awarded Purple Heart

By John Neville Louisville District

Two years ago, Capt. David Burrier was gently probing the roads in Afghanistan with a hatchet, searching for the deadliest weapon facing U.S. troops, the improvised explosive device (IED). Today Burrier is a Louisville District project manager working at the Olmsted office, and he has a Purple Heart. Col. Luke Leonard, commander of Louisville District, presented Burrier with the Purple Heart for injuries suffered in Afghanistan.

Burrier's unit was the second platoon of the 264th Engineer Clearance Company based at Fort Bragg, N.C. They deployed to Afghanistan in December 2009 with the mission to locate and eliminate IEDs so that other Soldiers and their vehicles could travel with less threat.

The Army has mine detecting equipment on some vehicles, but Burrier said the dismounted patrol was often more effective. Squads of Soldiers would walk on each side of the road looking for IEDs and the wires that run from the bomb to the detonator, usually held by somebody out of sight.

Burrier and one of his squad leaders walked in the road poking the ground for pressure plates, another device used to set off IEDs.

"I didn't really think about it. I just knew that if I hit an IED it's just me," Burrier said. "But if a vehicle hits it, it's probably eight young Soldiers. So that's what mainly enabled me to do it, knowing that I might save eight young Soldiers, whether I found the IED without detonating it or it detonated by itself."

On two consecutive days in April 2010, Burrier and his platoon were hit with IEDs. The first, a 150-pound artillery round, exploded 10 meters (about 32 feet) from him. Luckily, Burrier only suffered a concussion, but the next day a 107mm (about four inch diameter) rocket awaited them with a different outcome.

The rocket was buried in a mud wall, which commonly



Photo by Debra Hunter, Louisville District
Col. Luke Leonard, commander of Louisville District, pins the Purple Heart on Capt. David Burrier. Burrier was injured by an improvised explosive device in April 2010 while serving in Afghanistan. Burrier is now a project engineer at the district's Olmsted project.

separates living areas much like a fence. Burrier was about 10 feet from the wall and his squad leader was about five when the hidden triggerman detonated the rocket embedded chest-high into the wall.

"It blew shrapnel and rocks from the wall," Burrier said. "I got a piece of shrapnel in my left forearm and a severe concussion. I don't remember a lot of it."

A camera mounted on a HMMWV captured everything. "All you can see is me and my squad leader standing in a road that's covered in smoke and dust," Burrier said. "You can see us running toward the vehicles and there is a good five minutes there where I don't recall a single thing that happened."

Burrier said he and his squad leader instinctively ran to the vehicle, but they were still deeply fogged by their

"The video just shows me walking around in a daze," he recalled. "I actually attempted to walk back in the area, but my platoon sergeant saw me disoriented and actually grabbed me by my (armor) plate carrier and chucked me up against the wall and said, 'Sit down and wait for the medic."

Nobody in second platoon was killed that day, but six other Soldiers were injured in the blast. Burrier's squad leader, the closest Soldier to the blast, suffered the most severe injuries. An entire side of his body was peppered with shrapnel and rocks.

Despite their injuries, Burrier and 10 other Soldiers from the platoon kept clearing the road for another kilometer (about half a mile), a point where they received basic medical aid. After an hour, the platoon headed back to their forward operating base (FOB), over the same road. It was an "up and back mission," over a distance they'd just cleared, but the enemy is known to plant IEDs for these return trips.

"We had to clear our way back, and we found another one," Burrier said.

Once back at the FOB, the injured received more thorough medical check-ups. Burrier gave a report of the day's events to his commander, then called his wife, Hunter, and told her what happened.

"She was upset and cried, but I told her don't worry, that I'm still the same husband now, and I'll be the same husband when I get back," he said.

After the call, he checked on the other guys, and then played a game of spades. Second platoon took just one day off to recover. There were more roads, and there were more IEDs.

Buxbaum

Continued from previous page

"There have been a couple of instances where we've actually changed things," Buxbaum added. "Sometimes folks on the bottom rung of the ladder think, 'We can't fix that. My input doesn't matter.' Well, it does matter, and we've made some changes based on what the field has told me."

The job hasn't all been hard work. Anyone who visits everywhere in the Corps of Engineers will see interesting things, and have some fun.

"Each district had its own nuances that were striking," Buxbaum said. He mentioned the Hurricane and Storm Damage Risk Reduction System in New Orleans District, the Border Fence in Southwestern Division, watching tons of commerce transit the Corps' navigation locks, and seeing the work in Iraq and Afghanistan. "But if I had to pick one district, it would be the Mat Sinking Unit in Vicksburg District. I still think that was the coolest because of what they do, and the hard work those guys go through every day.

"And I got to see the 75th anniversary of the dredge Jadwin," Buxbaum added. "I even got to pilot the boat for a little while. You couldn't tell from looking that it was 75-year-old ship, and our guys did the renovation work."

After the excitement, hard work and globe-trotting travel of USACE, Buxbaum is looking forward to that motorcycle odyssey across America.

"If someone wants to reach me in August, it will have to be by cell phone because we're gone," Buxbaum said. "I've had a couple of job opportunities where they said, 'We'd like to have you in July,' and I told them, 'Sorry, I'm not available until September.' I've never taken that much time off in 32 years. Never. So it's time for me and Bobby to just spend some time together and get ready to move on to something else."

Buxbaum is remarkably unworried about what "something else" might be.

"I think I'm marketable enough that there will be opportunities," Buxbaum said. "But nothing is guaranteed and that's kind of scary. For the past 32 years I haven't had to wonder what I'm going to do tomorrow because I knew the Army would put me to work. Now that might not be the case, so there's a little apprehension. But I've got enough skills that I should be value added somewhere. I'm sure that will all work itself out."

Buxbaum and his wife have the same Zen attitude about where they will retire.

"We're going to let the job drive that," he said. "I've talked to a lot of folks who have retired, and almost to a person they say that in the first five years you'll hold two or three different jobs, and move once or twice until you find your niche. So we're going to let the job drive where we go. A lot of people get all apprehensive, but I'm sure it will all work out."

This is the last in a series of articles about Buxbaum. When he came onboard, the former command sergeant major told this writer that he wanted to use the Engineer *Update* to communicate with the Corps' workforce. What are Buxbaum's messages to the field in this final article?

"I want to thank everybody for everything they've done for me," he said. "Look at that map. All those pins represent people. People always tell me, 'Thank you for taking time out of your busy schedule.' And I always say, 'No, thank you for letting me come out and spend time with you.' I tried to make them feel important because they *are*. A lot of them say, 'I'm just a lock operator,' or 'I'm just the maintenance guy.' And I tell them, 'No, you're the lock operator. You're the maintenance guy. You are important.'

"So I really just want to thank everyone," Buxbaum said. "It's been a good four years. I've had a lot of fun."

Iraq work is reduced, but continues

By Joan Kibler Middle East District

Though the Iraq construction program is a fraction of what it once was, the U.S. Army Corps of Engineers continues to manage \$350 million in projects to help build facilities. In seven years starting in 2004, USACE completed more than 5,000 projects in Iraq with a value of \$8.8 billion. The construction program was crucial in the efforts to secure a new and reliable government for Iraq.

Today, Iraq's government and the U.S. enjoy bilateral relations based on mutual goals. The arrangement -- known as the Strategic Framework Agreement for a Relationship of Friendship and Cooperation between the United States and the Republic of Iraq -- is designed to help the Iraqi people stand on their own and reinforce Iraq sovereignty while protecting U.S. interests, according to the U.S. Embassy-Iraq.

"Our role is to deliver infrastructure that contributes to stability and security," said Lt. Col. Anthony Mitchell, who served a yearlong tour as the officer in charge of the Middle East District's Iraq Area Office. His tour ended in June.

The primary customers are the Office of Security Cooperation-Iraq (OSC-I) and the Iraq Strategic Partnership Office; both are part of the U.S. Embassy-Iraq.

"All of our projects -- whether providing equipment for the Basrah Children's Hospital to benefit Iraqi people or building C-130 aircraft facilities to reinforce Iraq's national security – contribute to Iraq being a sovereign nation and a strategic partner for the U.S.," Mitchell said.

In the past year, he has seen dramatic changes.

"When I took this job (in July 2011), I understood the intent was to complete the last remaining projects from the major reconstruction program and to get them done before December 2011," Mitchell said. "In addition, when I arrived, there were a few foreign military sales (FMS) projects that had gotten started. I expected that my team, the newly formed Iraq Area Office, would finish the work within a year and that I'd be the last entity representing USACE in Iraq."

But that didn't turn out to be the case.

While Mitchell started with an area office of about 45 American military and civilians managing a \$700 million program, including projects in the warranty phase, he will finish his tour with less than one-third that number of people managing a \$350 million program, excluding any potential work. Similarly, the area office had nearly 120 Iraqi citizens assisting with carrying out the construction program. Today, there's one-third that number.

A year ago, about a third of the USACE program was FMS. Today, it's nearly half. FMS is a component of the Defense Department's security assistance program, which supports regional stability and mutual goals between the U.S. and its allies.

Mitchell predicts USACE will continue to support operations in Iraq for another two to three years, and most of that support will be for FMS projects aimed at strengthening Iraq air defense, ground and maritime capabilities.

Building defensive capacity

The FMS program falls under the OSC-I, which continues to develop the relationship between the U.S. military and the Iraq military, previously the responsibility of U.S.



Photo by Ted Upson, Middle East Distriction

USACE employees in Iraq often distributed school supplies to boys and girls. Capt. Ross May (center) and Ted Upson meet with children from the Ha'ael school near Taji.

Forces-Iraq.

"Our active FMS projects are aimed at better equipping the Iraq Ministries of Interior and Defense to protect that nation from internal and external threats," said Douglas Harold Plachy, program manager forward for FMS work.

Plachy is credited with coordinating the planning, design and construction of \$700 million of FMS cases for Iraq. Sixteen FMS projects are under contract, totaling \$166.8 million, and all are funded by Iraq. Many other projects are in the planning stages or being processed in accordance with FMS program requirements.

One of the earliest projects was the \$181 million border roads project built for the Ministry of Interior. "This has been one of our most successful projects," Plachy said. "USACE designed roads around the critical points of Iraq's border for security, and they're divided into segments for construction. Two of the three contracts finished early, and the quality of work is quite good."

Another showcase project, also for the Ministry of Interior, is the General Directorate of Counterterrorism facility in eastern Baghdad. The \$18.4 million project includes an office building, headquarters, barracks, warehouse and a power generator facility. It is expected to be complete by June 2013

Six FMS projects are underway to strengthen Iraq's defensive capabilities. These projects support the Iraq Ministry of Defense and its Air Force.

"While OSC-I is our direct customer for FMS work, we also work with the U.S. Air Force Materiel Command (AFMC) for projects that support the Iraq Air Force," said Joseph Zaraszczak, branch chief within Programs and Project Management Division.

The district is working with AFMC to provide facilities for F-16 aircraft to be stationed at Al-Asad Air Base. "A portion of the existing facilities will be renovated, while there will be a significant amount of new construction, with facilities estimated at nearly \$300 million," said Patrick Tilque, FMS Iraq project manager.

In a much smaller FMS case for AFMC, the district is renovating facilities to accommodate C-130 aircraft on the New Muthana Air Base in Baghdad. "This \$3 million case will allow the Iraq Air Force to maintain the aircraft and store spare parts," Tilque said.

Other FMS projects include a \$28 million military training complex at Al-Harthiya, a \$5.6 million military security school in Taji, a \$21 million contract to provide facilities such as administrative offices, security, and dining

facilities at Hawk and Tikrit Air Bases (also for AFMC), and a \$23 million contract to expand military outposts in Al-Anbar province.

Plachy said the FMS program is generally progressing well. "Iraq is a sovereign country trying to move ahead. USACE enjoys good relations with the military officers with the Ministry of Defense and Iraq Air Force. The work isn't easy, but we get it done."

The Iraq Area Office manages another contract to support OSC-I operations, outside of the FMS program. A \$55 million contract provides overhead covers at existing facilities in various locations to protect military and civilian personnel.

Programs that benefit Iraqi people

Middle East District has supported Department of State programs for several years. Today's work includes just over a dozen projects, valued at \$124 million, remaining from the major construction program as well as new initiatives.

The projects fall into two categories:

- Iraq Security Forces Fund projects, which support Iraq Security Forces in reaching their minimum essential capabilities. Many of these projects were completed before U.S. forces departed on Dec. 31, 2011, but a few remain.
- Economic Support Fund projects, which support establishing governance reforms at the local, provincial and national levels of government, as well as strengthening the private sector economy.

David Schmidt, program manager forward for State Department projects, works directly with the Iraq Strategic Partnership Office to accomplish and close out projects.

"Two of our most prominent projects are for the Ministry of Health at Basrah Children's Hospital and at the Maysan Hospital," Schmidt said. "At the children's hospital, work includes facilities operation and maintenance through an architect-engineer contract and procurement of additional medical equipment. This is the first hospital in Iraq dedicated to the treatment of cancer in children."

The continued assistance is important because U.S. and donor countries have invested more than \$166 million to construct and equip Basrah Children's Hospital.

The Maysan Hospital will also provide critical care for Iraqi citizens since it is being built in a governorate where there is an acute lack of medical facilities, Schmidt said. The \$12 million hospital will have 80 patient beds, an emergency department, two physician resident buildings, and supporting infrastructure.

In another high visibility project, "The district continues to support the Fallujah wastewater treatment plant by providing operations and maintenance support and training for the staff that operates it," Schmidt said. "In addition, we oversee a Department of State grant to the Ministry of Municipalities and Public Works for house connections and construction of a trunk line and pump station at the wastewater treatment plant."

Because the U.S. government has invested \$108 million in the construction of this system, the follow-on actions associated with the plant are critical for its operation. The project proved difficult to build over a seven-year period because of insurgent activity. The plant ultimately will serve about 100,000 residents of Fallujah, which did not have a sewer system before this project was built.

Continued on next page

USACE marks milestones in Afghanistan

By Paul GiblinAfghanistan Engineer District North

The U.S. Army Corps of Engineers marked two significant milestones in transferring ownership of new buildings to the Afghan government.

- Kabul's Vocational Technical Training School graduated its second class of Afghani trainees in construction and property management. USACE officials worked with the faculty to design and run the sixmonth course, which produced 58 graduates.
- USACE officials handed over nearly all operations and maintenance duties to Afghan forces at Darulaman Garrison, an Afghan army training base on the south side of Kabul. The turnover marked the largest transition of its type to date.

"I would say it's the culmination of several good months," said Cheryle Hess, chief of the Operations and Maintenance (O&M) Division in northern Afghanistan.

The primary difficulty in transferring operations and maintenance of new buildings to Afghanis is that after three decades of war and economic stagnation, the country simply does not have enough qualified property management professionals to do the job.

Meanwhile, there is an acute and growing need for skilled O&M workers. USACE is building hundreds of police stations, military bases and other infrastructure for Afghan forces.

As a result, USACE is teaching O&M skills to hundreds of workers. The Corps' military personnel and civilian employees teach those skills themselves, and they've partnered with Afghan colleges and vocational schools and outside contractors to train even more workers.

Maj. Mike Brannon worked closely with the Vocational Technical Training School's administrators to write the curriculum and to run it properly. The program was designed specifically so that graduates would be qualified to maintain the buildings that USACE is building.

Brannon is O&M Division's deputy chief of training and transition. He is a U.S. Air Force officer, and he based the curriculum on the USAF operations and maintenance program. The program features six trades -- plumber, electrician, carpenter, painter, mason, and heating, ventilation and air conditioning technicians.

"There are several hundred tasks per trade, and they're adapted for Afghanistan," Brannon said. The list ranges from simple to complex jobs. For example, the course-



Photo by Joe Marek, Afghanistan Engineer District Nort

Maj. Mike Brannon helped write the operations and maintenance curriculum so that Afghan forces can take the keys to manage buildings. work for plumbers ranges from cleaning a drain to installing a toilet. "It gets specific because you want them to

ing a toilet. "It gets specific, because you want them to truly show proficiency at each task."

Special considerations had to be made for the trainees, who were recruited by the Afghan ministries of defense and the interior. An essential first step was providing basic instruction in literacy and arithmetic. Just 28.1 percent of Afghan adults can read and write.

"I had carpenters who had never seen numbers – period," Brannon said. "They had never used a tape measure, never seen words."

Before the instruction, many trainees had compensated for their lack of formal education by using pieces of string to determine the length of lumber, bricks and other building materials.

"They made their own bricks," Brannon said. "They piled their bricks the way their father and grandfather did. Now we're trying to teach them to maintain the structures that we've built, which are more complicated."

The U.S.-funded structures have features such as concrete floors, door knobs, indoor plumbing and electric power, which are unfamiliar to many Afghanis. Before teaching trainees how to fix leaky water faucets, instructors had to teach them how faucets function.

Likewise, many recruits had no experience with electric power tools, Brannon said. "Obviously, there's a lot of safety training. Having a saw that spins by itself and can cut your fingers off? That was an issue."

The instruction went well. A few trainees accidentally severed the cords of their tools, but not their fingers.

Overall, 58 members of the 60-member second class

Iraq

Continued from previous page

The district is managing several other projects, all slated to be finished by September 2013.

The only constant is change

As his Iraq tour came to an end, Mitchell said that USACE will continue to shape its presence to meet customer requirements.

The Iraq Area Office will transition to a smaller organization structure operating from central Baghdad with project offices located with the work. The office will maintain its core of Iraqi citizens providing construction management services.

"The Iraqi citizens are crucial to our ability to deliver construction projects," Mitchell said. "They know our

processes, our quality standards, and our safety practices. They have pride and ownership in their work. As our mission phases down here, there is nothing that pleases me more than to see them moving on, to jobs in industry or with the ministries, better prepared because of what they learned while working with USACE. Developing the engineering capacity is an important contribution to stability in Iraq.

"I'm most proud of our ability to deliver projects," Mitchell said. "Every project completion is a victory. Every project completed benefits Iraqi people and represents our contribution to Iraq's stability."

Mitchell was replaced by Lt. Col. Jonathan Howell, who previously served as the deputy commander of the U.S. Army Engineer Research and Development Center.

graduated. They have since taken full-time positions at facilities throughout northern Afghanistan. Despite the success, there is plenty of work ahead. Current projections call for 3,500 operations and maintenance managers to maintain just the facilities that USACE is building.

The vast majority of the newly-trained personnel have been Afghan civilians, though there is discussion within the Afghan government about retraining some Afghan soldiers to take those duties. That decision rests with Afghan government officials.

Brannon also played a key role in developing the Corps' on-the-job training program for Afghan employees. The program is similar to the vocational school program and features four levels of achievement for each trade -- laborer, apprentice, journeyman and craftsman. The full program takes four to five years to complete.

To date, 230 Afghans have been certified as craftsmen, while 501 others are enrolled in the program at 15 facilities across the northern portion of the country. Brannon has also shared the program with other U.S. and coalition agencies in Afghanistan to ensure a uniform approach.

"The ultimate goal is transition," Brannon said. "We want the Afghans to be able to maintain and sustain all the things that we've built."

The focus on operations and maintenance also could help steady the Afghan workforce as U.S. and coalition forces prepare to withdraw. The U.S. and other NATO countries created thousands of construction jobs for Afghans during a 10-year construction blitz, but that boom is all but certain to end, or at least shrink dramatically, when U.S. and coalition forces withdraw. However, a portion of those construction workers could transfer to operations and maintenance jobs.

In the meantime, USACE has been successful in turning over buildings to Afghan forces. Previously, nearly all of the O&M functions were contracted to a U.S. company that was required to hire, train and eventually transition the work to Afghans. USACE officials have pushed the pace of transition. Rather than adding new buildings to the list for the U.S. contractor to maintain, USACE has started to sign over buildings directly to the Afghan government, expecting that the newly-trained property managers can assume responsibility for their upkeep.

The process is working well, Brannon says.

"The guys were paying attention. They understand how to operate and maintain these bases; they just hadn't had to do it. What we're finding is that as we remove buildings from the contract, giving them to the Afghanis, they like controlling their destiny."

The changeover at Darulaman Garrison was an important step in the transition process. Afghan forces have taken responsibility for nearly every building on the complex. To ensure that the mission didn't suffer, coalition forces retained oversight of the power plant, the water plant and the waste water plant to allow more training on those complex systems.

There are 167 buildings at Darulaman. The U.S. maintains just 10. Based on that success, USACE has increased the pace of turning over other projects to the Afghanis. Overall, Afghan forces have taken the operations and maintenance at 1,061 buildings since November 2011.

"It's been breathtaking to see how fast and how well the Afghans have been able to take over O&M responsibilities at a lot of places," Hess said.

Task Force Hope sets safety record

By Susan Spaht Task Force Hope

"Public safety is our top priority, and job site safety is our everyday duty," said Mike Park, chief of Task Force Hope. "Building defense structures for the Hurricane and Storm Damage Risk Reduction System to reduce the public's risk of storm surge is a very important mission, and providing a safe worksite for our contractors and employees is just as important."

In the past six years, the U.S. Army Corps of Engineers has amassed a remarkable civil works record while accomplishing its mission to design and build the Hurricane and Storm Damage Risk Reduction System for the Greater New Orleans area. USACE has established many civil works firsts in this mission, received numerous accolades for its effort, and attracted the attention of engineering professionals and academics worldwide.

While designing and building the levees, floodwalls, pump stations and surge barriers for the HSDRRS, the Corps created more than 60,000 jobs and logged about 36 million man-hours, and the number is still growing. Producing all of these imposing, state-of-the-art structures and putting in all these man-hours in such a short time is also a major USACE civil works accomplishment. Contractors worked especially long hours to meet their goals and deadlines; they worked in unfavorable weather conditions; they often worked holidays and weekends; and many times they worked at night under portable lights to meet their deadlines.

In the beginning, many skeptics said these kinds of construction feats could not be done with such a demanding schedule. Yet, there is surely no other government construction mission that has accomplished so much so fast and established so many civil works records along the way.

But the record that many Corps leaders are most proud of, and one that is perhaps the least touted, is the incredible record of safety for this mission.

Private construction businesses, and likewise the Corps, keep count of man hours and "lost time accidents" when determining how successful a job is. In the 36 million man-hours worked on the HSDRRS, the log shows just 39 lost-time accidents. That is a mere one per cent per 990,000 man hours with a frequency rate of 0.22 percent. That is an amazing statistic when you consider the amount of work, the number of man-hours, and the short time period in which those were accomplished. It is seven times below the National General Industry's safety average for heavy construction.

Here are some amazing stats

- The enormous Inner Harbor Navigation Canal Surge Barrier project was built in 18 months using more than one million construction man-hours with no lost-time accidents.
- The 23-mile St. Bernard floodwall was built in 20 months using 3.8 million construction man-hours with no lost-time accidents.
- The Bayou Dupre (LPV 146) portion of the St. Bernard floodwall was built by St. Bernard Levee Partners using 1.5 million construction man-hours with no lost-time accidents.
- Cajun Constructors, LLC built the Verret to Caernarvon portion of the St. Bernard floodwall in seven

PPE REQUIRED
FEET ON THE LAND
GLOVES ON THE HAND
STEEL TOE BOOTS
TYPE II SAFETY VEST
SAFETY GLASSES
HARD HAT



Photos courtesy of Task Force Hope

Constant reminders and available safety equipment helped Task Force Hope have an excellent safety record.

months using more than 1.5 million construction man-hours with no lost-time accidents. Cajun won the Mississippi Valley Division's 2011 Superior Safety Performance Award for Large Contractors.

Visitor safety

In addition to worker safety, the Corps also pays close attention to visitor safety. In the past six years, thousands upon thousands of people have visited HSDRRS work sites to examine the risk reduction structures up close, to see how they are built, and to learn how they will defend the area from storm surge. Domestic and foreign dignitaries, elected officials, community leaders, school groups, business organizations and local citizen groups have been welcomed to Corps work sites. The IHNC Surge Barrier Safety Office, for example, handled more than 380 construction site tours in an 18-month period with more than 3,800 visitors.

"We want everybody to have a safe, uneventful visit to our construction sites," said Sherry Scott, senior safety specialist for New Orleans District.

Scott and her team have a standard safety procedure for all visitor groups. Before touring a work site, visitors must sign in, attend a safety briefing, wear appropriate apparel and wear appropriate personal protective equipment. "Safety is everybody's responsibility."

History in the making

"I don't know of another civil works mission that has accomplished so much in such a short time period," Park said. "Even though we have worked very hard to make ours the safest working environment we can, it has not totally been without incident. We will not forget that two men died working this mission, and our hearts go out to their families.

"We value our work force; they are the real people getting this massive job done for the people of the Greater New Orleans area," Park said. "I've never known a more dedicated and determined team. We are Team New Orleans, we are Building Strong, and we are making history."

USACE land helps panthers survive

By Jenn Domashevich Jacksonville District

After the U.S. Fish and Wildlife Service (USFWS) determined that Florida panthers wearing radio tracking collars had crossed the Caloosahatchee River near a disposal easement owned by the U.S. Army Corps of Engineers, a request was made for USACE to relocate their easements, which would allow the property to be purchased and preserved as a panther crossing habitat.

Through the collaborative efforts of numerous federal, state and private organizations, the 1,278-acre American Prime property in Glades County was purchased by The Nature Conservancy just one day before it would have been sold at auction.

"By relocating the Corps' easements, we will preserve this critical panther habitat crossing and allow the current **Continued on next page**



Photo courtesy of Jacksonville Distr

The Nature Conservancy purchased a 1,278 acre tract of USACE land to preserve a panther crossing at the Caloosahatchee River.

COBie aids Mark Center construction

By Dana FinneyEngineering Research & Development Center

The Construction Operations Building Information Exchange (COBie) supported a "mega-project" for the first time with design and construction of the new Mark Center in Alexandria, Va. New York District managed the project, providing 1.7 million square feet of facilities for the end user, Washington Headquarters Service (WHS).

"The RFP (request for proposal) specified COBie in addition to building information models for each facility," said Dan Ward, area engineer for the district. "Originally, it also required four sets of as-built drawings with Mylars, but WHS wanted only electronic files at turnover – no hard copies of anything."

COBie, a data standard that is part of the National Building Information Modeling (BIM) Standard, provides a tool to capture and record important project data at its point of origin. This project information includes equipment lists, product data sheets, warranties, spare parts lists, preventive maintenance schedules, and other, often unique, data. The information captured using CO-Bie is data essential to support operations, maintenance, and asset management once the building is in service.

"The common practice of gathering this information at the end of construction through a 'job crawl' is expensive, time-consuming, late, and often inaccurate," said Dr. Bill East, researcher at the Engineer Research and Development Center, who led COBie's development. "The COBie approach is to use an accepted national data standard and enter the data as it is created during design, construction and commissioning."

The Department of Defense requirement for the Mark Center grew out of the 2005 Base Realignment and Closure Act to provide a new workplace for some 6,400 employees. The initial plan was to consolidate DoD workers from rental properties dispersed throughout the National Capital Region into facilities at Fort Belvoir, Va. How-



Photo by Marc Barnes

The Mark Center, also known as the "BRAC 133" project, had all component data and documentation turned over to the customer in electronic format that uses the COBie data standard.

ever, community and developer concerns about the existing transportation infrastructure near the fort led DoD to opt for a new complex to be built in Alexandria with easy access to and from Interstate 495.

According to Ward, the Mark Center's main buildings include office workspace, a building operations center, conference rooms, passive and active information technology components, a video teleconferencing center, training and instruction facilities, an auditorium, a physical fitness facility, and cafeteria. Support structures include an access control/visitor center, remote delivery facility with warehouse, and parking garages for 3,300 cars.

Capturing data using COBie for this number of diverse facilities would prove challenging. The design documents were developed in BIM and Jason Betteker, project executive for the general contractor, Clark Construction Group, said, "For a project this size, we had to employ on average two full-time staff engineers dedicated to managing COBie and BIM during design and construction."

Joe Gabel was one of the Clark engineers charged with overseeing the COBie and BIM deliverables. "The CO-

Bie requirement in the RFP was given in pretty general terms. To gather the right data for the project, there was a lot of trying to nail down exactly what we needed for the COBie data for each facility."

The COBie data plan provided a roadmap for collecting data that would benefit the future property manager.

Once they had identified the requirements, the project team launched a four-phased approach to data submittal. "About midway through the project, we exported data from the BIM models," Gabel said. "That included information about spaces, finish, door schedules, and so on that was extracted for populating the COBie spreadsheet. Next, we got in a good portion of the mechanical and electrical data that would be needed in populating the O&M staff's facility management system."

Ward noted that electrical and mechanical contractors had a huge amount of data to provide for such a large project. At the district office, engineers with BIM experience did most of the quality assurance work, which also took a considerable effort.

According to Gabel, "In the third phase, we wanted to add document identification references to the facility data captured using the COBie format. You can list this in the spreadsheet used to capture the facility data and then link to the actual documents. We decided to enter all of the documentation as .pdf files" including the as-builts.

The last phase before final submission of COBie data provided no new information. The purpose was to identify any changes that occurred since the previous submission and adjust anything affected downstream. For example, changing just one room number can require changes to numerous other data points.

The Mark Center complex was completed in August 2011, 37 days ahead of schedule. Ward called the COBie implementation process a learning experience. "We went into it with a lack of knowledge about how to achieve the necessary checks and balances, so there had to be some level of trust to get through the process. But in the end, we achieved a product that worked."

Grabel added, "My perspective is that all of this building data would have been needed in some form later. The COBie standard makes collecting it easier and gets everyone on the same page for organizing it in a consistent manner so that it's available and useful after turnover."

Ward is currently managing another project requiring collection and production of building data using COBie. With this pilot project at Fort Drum, N.Y., Ward seeks to gain more insight into best practices for implementing COBie while providing added value to the Fort Drum Directorate of Public Works and building users.

USACE Headquarters is seeking more projects for the COBie building data collection process to provide better turnover data to building maintainers and users. The Headquarters point of contact for the COBie building data collection process is Jim Lovo. "Headquarters is coordinating COBie pilots to accelerate the learning curve so that we can provide added value to our engineering and construction customers at a reduced cost," Lovo said.

To streamline the capture of building data electronically, Headquarters is authorizing use of the ProjNet eSubmittal application. In addition, East is nearing completion of a COBie Model Server and an eCommissioning application as part of the ProjNet suite of tools. Ward will pilot these tools in the Fort Drum project.

Panthers

Continued from previous page

population to expand up into the Kissimmee River watershed," said Col. Alfred Pantano, commander of Jacksonville District. "I'd like to applaud the Nature Conservancy, Natural Resources Conservation Service, National Wildlife Refuge Association, U.S. Fish and Wildlife Service, notably Paul Souza, and the Corps' Karl Nixon for making this dream a reality."

USACE had two 50-acre disposal easements along the waterfront of the American Prime property, and the USFWS asked the Corps to relocate their easements to the western boundary of the property so that the Natural Resources Conservation Service (NRSC) could encumber the property with a Wetlands Restoration Program easement, purchasing the development rights to the property and saving the land from any future urban development.

USACE prepared all the necessary documents to facilitate the easement exchange that would create the proposed panther corridor, which will allow panthers to disperse from habitats restricted to south Florida. Without the combined coordinated efforts of all the agencies, the land was scheduled to be sold on the steps of the court house the following day.

"The successful completion of this land acquisition ef-

fort makes me proud to be part of the multi-agency team, our organization and our mission," said Karl Nixon, deputy chief of Real Estate Division. "It reaffirms to me that, when people unite for a common goal of protecting valuable habitat, we can make a difference."

This acquisition will encourage the natural recovery of the Florida panther population by providing habitat where animals can den and stalk prey, and migrate from southern Florida to areas north of the river.

"The panther population must grow to prevent extinction, yet the current habitat south of the Caloosahatchee River is at maximum capacity," said Shelly Lakly, executive director of The Nature Conservancy in Florida, in a press release. "That's why buying this land -- the land known to be the route out of south Florida -- was so critical. It opens up a future"

The purchase was covered by about \$2 million in private philanthropy from The Nature Conservancy, and \$1.5 million each from the USFWS and the private entity that purchased the property encumbered by conservation easements. In addition, NRCS provided \$1.5 million to purchase a conservation easement on 718 acres of the property, and \$200,000 was provided through Acres for America.

West Point to get new science center

By JoAnne Castagna New York District

In the late 1960s, Shane gazed at his TV screen in awe as he watched astronauts walk on the moon. It was then that he set his sights on becoming one of them. Today Col. Robert "Shane" Kimbrough, a NASA astronaut and active duty Army colonel, believes that the science education he received at the U.S. Military Academy at West Point, N.Y., helped him to reach his dreams.

The academy's science education is about to get even better. New York District is building a new science center for the cadets that will take their science education well into the 21st century. The challenge is maintaining the look of the historic 200-year-old campus.

"The science education I received piqued my interest and made me want to do things I normally didn't think of doing," said Kimbrough, who graduated from West Point in 1989. "It also was a huge foundation for me becoming an astronaut. The academy provided an incredible physics, chemistry and biology education and skills in problem-solving and experimentation, all invaluable skills I need as an Army officer and NASA astronaut.

"At NASA science is obviously hugely important. We have to be able to launch a vehicle and people into space, space walk, perform work in orbit and get the crew back home safely," said Kimbrough, who has flown on the space shuttle and performed several space walks. "All of this is science and math. I had a great background at West Point so it helped me to understand all of this better than most folks."

Kimbrough is excited about the new science center being built at West Point by USACE and says the cadets will be even more prepared for the future. New York District has performed a number of construction projects for the academy and was asked to build a new science center.

The district is building the new science center by renovating and combining two existing buildings – Bartlett Hall, the academy's old science building originally built in 1913, and the nearby old library.

Since the campus is a national historic landmark, the academy asked New York District to keep the gray and black granite shells of both Neo-Gothic buildings intact. They are doing this by gutting and renovating the interiors of both buildings and connected them to create one large science center.

When complete, the new science center will be an expanded and modernized multi-purpose science facility that will sit on 300,000 square feet of property. The complex will have larger classrooms and labs and new equipment for the cadets to study physics, optics, laser technology, chemistry, life sciences, biology and biochemistry.

"At West Point we encourage the cadets to perform hands-on science experiments, and this building's new design is helping us expand this," said Col. John Graham, Associate Dean for Research and Chief Scientist at West Point. "USACE is taking this opportunity to re-think how science needs to be taught. Instead of having five or 10 cadets doing the same experiment, two are now doing it. This is amazing. Whenever you do science in a large group, someone always gets left behind. But when there are two they both play an active role in the work. We are revolutionizing how we do science here. Our faculty is very excited."



Photo by JoAnne Castagna, New York Distric

The science center preserves the historic look of West Point's architecture.

USACE may be modernizing the academy's science education, but they are also maintaining the historic look and feel of the campus by preserving the buildings' granite exteriors with their old leaded glass windows. They are also preserving other historic elements of the buildings including some of the interior stone walls, marble, slate from wrought iron railings, tile flooring, as well as a staircase and ceiling archways.

"The goal for historic integrity is not to try to copy or mimic. It's to blend in and make it look new, but still take on some of the details of the old architecture," said Jeffery Friese, senior project engineer. That's not easy. "It's very challenging to just gut the interior and leave the exterior. This is especially so when you have limited space around the building, limited areas to get in and out of the building, and an occupied building next door."

Another challenge for the engineers is the wiring. "When you turn a library into a science building there is just no ceiling space for all of the wiring," said Timothy Cain, contracting office representative. "It's a challenge to coordinate and organize all of the wiring, science lab items, utilities and plumbing in the ceiling. It was a massive coordination effort to get everything to fit and everything to layout the way we liked it."

The building may appear untouched from the outside, but USACE is modernizing the center to make it a safer environment for the cadets and faculty. They are removing asbestos and lead paint, providing handicap accessibility, improving the air ventilation system, installing a new roof and improving the building information systems. Shatterproof windows will be installed inside the old leaded glass paned windows, which will prevent shattering from earthquakes and provide some energy efficiency.

The project is expected to be completed in 2016. Graham said, "When we are done we're going to be at the cutting edge of physics, chemistry and laser technology. USACE is using this opportunity to shift us way into the future and beyond. This was not a chance to just get up to standard; it was a chance to get into America's future."

HR Corner

Pathways Program promotes federal jobs for students, grads

By Cheryl Hiraoka Headquarters

On Dec. 27, 2010, President Obama signed Executive Order 13562 requiring the Office of Personnel Management (OPM) to develop a new program to hire students and recent graduates into the federal workforce. The effective date of the Pathways Program was July 10, and it is now underway in the U.S. Army Corps of Engineers.

The Pathways Program encompasses three tracks that promote federal employment opportunities for students and recent graduates. They are the Internship Program for current students, the Recent Graduates Program for those who have recently graduated from qualified educational institutions, and the reinvigorated Presidential Management Fellows (PMF) Program for those who obtained an advanced degree such as graduate or professional degrees.

The Pathways Program replaces several current student programs.

Internship program. The Internship program consolidates two existing internship program into a single program designed to provide high school, vocational and technical, undergraduate, graduate and professional students opportunities to work in the government through federal internships. Successful interns may then be converted into permanent federal civil service once they have graduated and completed 640 hours on the job.

The Internship program is modeled after the existing Student Career Experience Program and Student Temporary Experience Program.

Recent Graduates program. The Recent Graduates program provides developmental opportunities in federal jobs for individuals who have recently graduated from qualified educational institutions or programs. Individuals eligible for this program must have completed a posthigh school education program within the past two years. Veterans who could not apply during any portion of the two-year eligibility period because of military service obligations will have six years to apply after completing their degree. This program replaces the Federal Career Intern Program.

Presidential Management Fellows Program. The PMF Program has been the federal government's development program for graduate and professional degree candidates for more than three decades. The PMF has been retained, but it has been made more flexible by, for example, expanding the eligibility window for applicants to include those who have received a qualifying graduate degree within the preceding two years.

Transition. Agencies will have a six-month transition period until Jan. 6, 2013, to convert those currently in one of the replaced programs into the new Pathways Program. Agencies will then be required to execute a memorandum of understanding with OPM as a prerequisite to using the Pathways Program.

We will provide more information such as how to apply and where to apply when implementing guidance is received.

AROUND THE CORPS



The dredge *Thompson* worked on the inland rivers from 1937 to 2005. It will now be on permanent display at Prairie du Chien, Wis.

Dredge Thompson

USACE employees and retirees and Mississippi River residents lined the banks of the Upper Mississippi River to see the dredge *William A. Thompson* leave the USACE service base in Fountain City, Wis.

The *Thompson* arrived at its final destination in Prairie du Chien, Wis. There a nonprofit group, Community Development Alternatives, Inc., accepted the dredge from USACE and will make it a permanent static display.

St. Paul District used the *Thompson* to maintain 850 miles of the Upper Mississippi River, 335 miles of the Illinois River, and other inland rivers from May 1937 until May 2005, well after its projected life of 50 years. While in use, it was the largest of its type and meticulously maintained. In 2005, it was replaced by the Dredge Goetz.

"There's a lot of Fountain City history going down the river right now," said John Sagan, Fountain City resident and Fountain City Historical Society member, as he watched the motor vessel *General Warren* tow the *Thompson* away from the dock. "It was a big piece of this town. A lot of people here worked on this boat. It helped keep this community going."

Mark Krumholz, USACE navigation program specialist, worked for several years to find the *Thompson* a new home, not wanting to see the vessel scrapped. "The dredge *Thompson* is an icon on the river. It saw the transition of the Upper Mississippi River from steamboats, Mark Twain and lead lines to state-of-art diesel-electric power and a new era of channel maintenance by USACE. I started my career with the Corps on the *Thompson* as a deckhand on the midnight shift in August of 1974, so to see it sold to someone who will take care of it is rewarding."

"The city is sad to see it leave, but we're glad to have it go to a good home in Prairie du Chien," said Peter Schaffner, Fountain City mayor.

Family Readiness Awards

Program innovation, care for our families and commitment to creating an enduring Family Readiness Program were all factors in conferring top honors on two nominees for the 2011 Family Readiness Awards.

Maria Eggers, Jacksonville District: Family Readiness Individual Excellence Award.

Huntington Employee Assistance Resource Team,

Huntington District: Family Readiness Outstanding Team Achievement Award. This team was co-chaired by Carolyn Jones and Jeanne Ann Mullins.

The director of Human Resources established these awards to recognize an individual's and a team's contributions to advance the outreach and quality of the Family Readiness Program. They honor innovation, creativity, commitment and care for the family members of USACE personnel and commitment to the development of family readiness plans, strategies, systems, and products that achieve the principle of providing the best care to our families

The honors will be presented at the USACE National Awards Ceremony during the Senior Leader Conference in Little Rock, Ark., Aug. 6.

FUDS cleanup

Honolulu District has completed the cleanup of the Edoni Formerly Used Defense Site (FUDS) cleanup on Saipan. The Edoni Site encompasses roughly 1.4 acres and is a former borrow pit where coral aggregate was mined.

The cleanup project removed 1,537 cubic yards of soil contaminated with polychlorinated biphenyls and about 1,800 cubic yards of lead-tainted soil.

"Our goal in the FUDS program is to reduce risk to human health and the environment through implementation of effective, legally compliant, and cost-effective response actions done to the highest standards of safety," said Helene Takemoto, FUDS project manager. "We are pleased to be winding up another successful environmental project that will have a positive impact on the people of Saipan. We are fully committed to public health and the safety of our workers and the public."

HyDRA

The U.S. Army Geospatial Center (AGC) and Engineer Research and Development Center have released the Hydrologic Data Resources Application (HyDRA), a webbased data survey and analysis tool.

HyDRA allows users to view, collect and edit unclassified water resources with Android 2.2+ OS smart devices using Google Maps and Google Earth applications. Wells, water tanks, water storage points, dams, treatment plants and other features may be added, queried and edited in "connected" and "disconnected" modes. Collected features may also be edited through a Web page using the same functionality.

The Web page and app were created to assist U.S. Army engineers and the water community working in infrastructure and reconstruction operations with feature collection and identification. The mobile application may be downloaded from the AGC's website at www.agc.army.mil/WRapp/hydralogin.cfm.

HyDRA's database was initially populated with more than 1.6 million features. Information collected is added to the AGC's Water Resources Data Base, an enterprise geodatabase containing information on the location, quantity and quality of land-based surface, ground and existing water facility features to support overseas DoD water resource missions.



Col. Donald Degidio Jr., commander of Far East District, has been awarded a Korean name. Jeon Taek-hee means "Shining Houses" in Korean. In this photo, Degidio and Suh Jin-Sup, chairman of the ROK-US Alliance Friendship Association, hold a banner with the name.

Korean name

Col. Don Degidio Jr., commander of Far East District, received a Korean name during a ceremony at the Korea Ministry of National Defense. Suh Jin-Sup, chairman of the ROK-U.S. Alliance Friendship Association, gave Degidio the name Jeon Taek-hee. Jeon rhymes with Degidio's first name. Taek-Hee means "Shining House."

The name is significant because the FED commander oversees construction at U.S. Army Garrison Humphreys, the new home for most of U.S. Forces Korea.

"As we move forward with the Yongsan and Korea Relocations Plans, I give you my assurance that all of our projects will be shining houses that will stand strong as our great alliance," Degidio said.

Mongolian officers visit

Four Mongolian Army medical officers met the Alaska District commander and project delivery team members responsible for coming projects in their country.

The officers were in Alaska for Arctic Care 2012, an exercise with the Alaska Army National Guard to provide care for underserved Alaska residents, and they took the opportunity to discuss tuberculosis clinic improvements and renovations planned in Mongolia.

The projects are part of the district's humanitarian assistance program in Southeast Asia. The district's Asia Office planned a scoping visit to Ulaanbaatar this month to assess the condition of the existing clinics and develop the projects' scope of work

USACE gets first female general

By Bernard Tate Headquarters

Brig. Gen. Margaret Burcham is the first female general officer in the history of the U.S. Army Corps of Engineers, but that wasn't her first thought when she got promoted.

"My most immediate feeling about being told that I was selected to be a general officer had nothing to do with being a woman," said Burcham, who commands Great Lakes and Ohio River Division (LRD). "I saw it as a chance to continue to serve, doing what I really love to do."

Burcham was promoted to brigadier general in a ceremony at Headquarters on Jan. 27. Her Army career began when she graduated from the U.S. Military Academy at West Point in May of 1982.

Burcham's career has included four other assignments with the U.S. Army Corps of Engineers. The first was deputy resident engineer in Seoul, Korea, for the Dragon Hill Lodge project in Far East District. Besides LRD, Burcham has also commanded Europe District in Wiesbaden, Germany, and Gulf Region North District in northern Iraq.

Burcham took command of LRD on Sept. 19, 2011. She is responsible for a division with 4,800 employees that covers 335,000 square miles and serves 58 million people in 17 states.

"I've had a very good career," Burcham said. "It's all in one's attitude, and my attitude is 'I'm here to serve."



Photo F.T. Eyre, ACE

Brig. Gen. Margaret Burcham, commander of Great Lakes & Ohio River Division, is the first female general officer in USACE history. Retired Lt. Gen. Robert Van Antwerp, former commanding general, congratulates Burcham moments after her promotion to brigadier general.

Although service to the Army is more important to Burcham than being the first female general officer in USACE, she is aware of what that historical first means.

"By assuming this rank, I'm taking the responsibility to set a great example and to do justice to the women who have gone before me," she said. "There have been other women who served admirably and competently and would have been good candidates for this role. I know all of them; they've been my friends, supporters, mentors and colleagues. So I feel a great responsibility to carry that guidon for them."

Burcham is also quite aware of the opportunities that her new rank brings. According to Francois Bonnell, director of the U.S. Army Women's Museum at Fort Lee, Va., there are 30 women generals currently on active duty in the Army, including four mobilized from the Reserves and National Guard.

"It's a very small number of women, and I'm looking at how I can contribute as a woman general beyond my role as LRD commander," Burcham said. "For instance, in March I participated in a panel at Fort Eustis, Va., talking to several hundred junior officers and senior NCOs about leadership with other women generals. That wasn't directly related to my job in USACE, but I have a responsibility to participate in some of those Army-wide events. They provide a chance to increase awareness of the USACE mission across the broader Army. If they ask me to participate because I'm a woman, I can take advantage of the chance to say, 'Hey, do you know what USACE is?' because many people aren't familiar with our mission. In the Army, there's a lack of understanding of what we bring to the fight and our value to the nation. So I want to go out when I get those chances to gain support an appreciation for all that USACE adds to the Army and our role in providing service to the nation.

Engineer of the Year

Continued from page one

lence and hard work were their own rewards, and if you do good things, good things happen," he said.

His heroes were the Oakland Raider's roguish, carousing quarterback Kenny Stabler, and his math teacher, Mr. Herrin. "Mr. Herrin saw something in me," Remus said. "He set me up for success in college and later in life."

Remus credits retired Wayne Dorough with being the "best supervisor I could have had. He gave me freedom and support, and allowed me to grow. As a manager today, I try to keep that in mind. I try not to be a shackle."

When asked to list what he views as his three greatest personal characteristics, Remus lists honesty first and optimism third, sandwiched around the ability to recognize one's limitations.

"I believe it's my duty to be as honest as I can be with co-workers and supervisors," Remus said. "Honesty adds value to the organization." Regarding his bright outlook on life, "I just think things will be better rather than worse."

As for working with teammates, "I think people want to and like to do great work." So he lets them.

"John Remus is as fine a professional engineer as you will meet in USACE," said Randy Behm, chief of Flood Plain Management. "He is thoughtful and considerate of his employees and customers and always willing to listen to all sides of an issue before passing judgment. He provides his section chiefs and their employees room to conduct their business and is always there to bounce ideas off of. And, if you don't see eye to eye with him on a matter,

he will always consider your perspective before deciding on a path forward."

"John has the rare combination of technical expertise and people skills that allows him to make difficult engineering decisions for the Missouri River basin while strengthening relationships with both internal and external stakeholders. He is a solid role model for young engineers in Omaha District," said Kellie Bergman, chief of Water Control and Water Quality Section. "John consistently removes obstacles so that his employees can do their jobs better and faster. This not only results in high-quality products, but also high morale among his staff."

Schenk says Remus' longtime emphasis on mentoring is rock solid. "John does a great job mentoring new staff. He recognizes the value of bringing in students and training them to be our future. He is active in the engineering mentoring of middle school and high school students during Society of America Military Engineers events. Even when things are extremely busy at work, he finds time to mentor."

"True but funny story about John," said Ruch, the district commander. "When we were having daily news conferences for four or five months during the worst part of the flood, the news media would come at me with a lot of questions. I was mostly sure of my answers, but occasionally I found myself looking across the table to John Remus, like getting an approval from your college professor, to see if he was nodding or shaking his head. If he nodded I knew I got it right. If not, I knew I could have come up with a better answer."



Photo courtesy of Omaha District

John Remus is the USACE Engineer of the Year. Remus is the chief of Omaha District's Hydrologic Engineering Branch.

The professor is in, but his team is doing all the great stuff.