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Engineer Update

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Chief reflects on an eventful year

Article by Bernard Tate

Photos by F.T. Eyre

Headquarters

(Editor's note: On Oct. 23, Lt. Gen. Robert Flowers passed the one-year mark as Chief of Engineers. The editor of "Engineer Update" recently interviewed him about that eventful year.)

Update: Since the fighting in Afghanistan is making headlines, let's start there. Have you received any early indications if the Corps will play a role in Afghanistan and, if so, what that role might be?

Flowers: We don't have any specific missions yet related to Afghanistan, but we're prepared to provide support in the Corps' full range of mission areas. And while it's too early to predict, I'd say some areas that could come into play would be real estate for bases; and construction support and technical expertise to establish intermediate staging bases or operations bases. It could be post-hostilities restoration. Those are traditional missions for the Corps, and we're prepared to execute them now.

Update: Please give us your assessment of the Corps' response on Sept. 11, and during the days since.

Flowers: First, I'm enormously proud of the job done by everyone in the Corps in response to the attacks on Sept. 11. In New York, we had the division engineer on the ground within two hours of the attack, assessing the situation and lending assistance. The New York District boats did yeoman's service helping evacuate people from Manhattan, ferrying firefighters and relief workers into Manhattan, and keeping fuel and water going to firefighters.

In the days following, we had a tremendous outpouring of volunteers wanting to help out in New York. And the numbers weren't in the hundreds; they were in the thousands! I found that tremendously gratifying. The work we did through the Federal Emergency Management Agency (FEMA) — structural response, temporary power, debris removal, all of that — was welcomed by the city, and I think helped establish a great relationship among the Corps, the city, and the state of New York.

Most directly affected were our people in New York District. Their office is about six blocks from Ground Zero, and as they were evacuating on foot the towers were falling behind them. Within three weeks, that district had relocated into three or four temporary locations, completed the fiscal year closeout, continued with all of their work, then reoccupied their offices. That's an amazing feat. It takes quality people to do that, and really it speaks a lot for the character of the people in the Corps, and in particular the people in New York District.

At the Pentagon, within a couple of hours we and FEMA had occupied the emergency offices, and we had people on the ground working with search and rescue teams assessing what we could do and offering our assistance. We provided structural experts, temporary power, and threw a figurative safety net around contractors to back them up. We're doing a forensic study of the building, participating with the Defense Threat Reduction Agency to improve future protection at the Pentagon and other structures.

The response was tremendous, and I couldn't be more proud of our organization.

Update: According to news reports, the Corps will build the memorial to the victims of the Pentagon attack.

Flowers: We don't yet know what form the memorial will take. We're trying to get very broad input on ideas on what it should look like, and we intend to involve the

families in selecting the ultimate memorial.

There's some congressional action on location and timing for the memorial. We'll see how that plays out, but I assume the memorial will be someplace accessible to the public near the Pentagon or in Arlington, Va. We'll work diligently to meet the goal of dedicating the memorial on Sept. 11, 2002.

Update: In your briefing at the Senior Leaders Conference (SLC), your goals for Year One were to re-establish relationships with the administration, Congress, and the public. How has the Corps progressed in those goals?

Flowers: Well, I think we've done very well. We've probably done a record number of testimonies before Congress telling the Corps story. We've made a concerted effort to provide information to all members of Congress about the Corps, who we are and what we do. We worked conscientiously with the old administration to establish good communication and contact, and have transitioned that into the new administration.

I think the relationship among the Corps, the administration, and the Army is solid. I assess our relationship with Congress as good and getting better, and I think we've re-established some great relationships with stakeholders and traditional partners in industry. I was encouraged when Gov. Ridge, in his acceptance speech as Director of Homeland Security, referenced the Corps of Engineers.

Update: A new Assistant Secretary of the Army (Civil Works) has been confirmed. How is the current relationship between the Corps and the ASA(CW) office?

Flowers: It's going very well. Mike Parker and I

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"I'm enormously proud of the job done by everyone in the Corps in response to the attacks on Sept. 11...The response was tremendous."

New ASA(CW) sworn in

Mike Parker is the new Assistant Secretary of the Army (Civil Works). President George Bush signed the confirmation on Oct. 1. J.B. Hudson, Administrative Assistant to the Secretary of the Army, swore-in Parker on Oct. 3.

Parker is a native of Mississippi. In 1989, he was elected to represent the Fourth Congressional District of Mississippi in the U.S. House of Representatives. While serving the House from 1989 to 1999, Parker served on the Budget, Appropriations, Transportation, Education and Workforce, and Veterans Affairs committees. While on the Appropriations Committee, Parker sat on the Energy and Water Development, and Military Construction subcommittees.

Parker calls Brookhaven, Miss., home, and maintains a residence in Alexandria, Va. He and his wife Rosemary have been married for 31 years. They have three children — Adrian, a pro golfer; Marisa, a junior in college; and Thomas, a junior in high school.



Mike Parker is the new Assistant Secretary of the Army (Civil Works). (Photo by Bernard Tate, Headquarters)

Insights

Corps response is awe-inspiring

By Col. Lowell Moore
Chaplain, U. S. Army Corps of Engineers

November means Thanksgiving is just around the corner, and many of us look forward to a day of fun, family, feasting, and football. But since Sept. 11, Thanksgiving will take on whole new shades and levels of meaning.

We all know Thanksgiving began when a few pilgrims were grateful because they could pray and worship without a government telling them to stop. And they could pray and worship without a government telling them when and where they could do it.

They were also grateful just to be alive, and they were grateful that the fruits of their labor in the fields had provided enough food for most of them to stay alive through the coming winter. Even though they would all be well below the poverty level by today's standards, they were eternally grateful for what they had and decided to express their gratitude with a meal that gave rise to our present-day Thanksgiving.

Blessings

I find it interesting that a holiday with such humble, meaningful beginnings has become an excuse for uncontrolled gluttony. It seems that if we don't eat until we are miserable, we haven't thoroughly enjoyed Thanksgiving, and we have failed in our holiday duty.

Since many of us are guilty of taking our blessings for granted, it is good for us to pause at this time of the year to reflect on all the good that we enjoy and thank God for our many blessings. We should be especially aware of our many non-tangible blessings like life, family, friends, health, freedom, and so on.

I have always taken time this year to reflect on my blessings and, as always, I am grateful for the things mentioned above.

But this year I am particularly thankful that I am a part of the U.S. Army Corps of Engineers. For some time now, I have been proud to be a part of the Corps, but my



Corps people wrote another chapter in our history with their response to the terrorist attacks at the World Trade Center and the Pentagon. (Photo by F.T. Eyre, Headquarters)

pride in the Corps soared when I saw how this organization responded after the Sept. 11 attack on America.

Amazing stories

I have visited the operation in New York City since the attacks. Some of the response I've been privileged to see first-hand, some I've heard or read about.

I watched as the members of the New York District refused to be paralyzed by the overwhelming difficulties imposed on them by the tragedy. Unable to return to their office, they set up temporary workstations in various locations around the city and continued to function. They coped with the disaster missions, continued with their regular work, completed a fiscal year closeout, and recently reoccupied their offices.

With pride, I talked to the 155 volunteers from all over the Corps who assembled in New York in support of the Federal Emergency Management Agency. I learned that everyone wanted to be there and was eager to help. Their

only disappointment was that they couldn't do more.

With amazement I listened to stories about the speedy way the New York District boat crews went into action and ferried more than 2,000 trapped people out of Lower Manhattan. The boat crews also provided fuel, antifreeze, and oil for the New York City fire trucks, transported 1,000 gallons of potable water to the firefighters, and ferried firefighters and rescue workers to the scene.

I was equally impressed with the way the 249th Engineer Battalion (Prime Power) quickly responded and used their skills to help install 50 generators to provide power to Lower Manhattan, particularly to the financial district, so the city could go back to work.

Thanks to Corps

It is not just what the Corps members did on site that filled me with pride; it was also the tremendous attitude of the entire Corps and their desire to help. When I visited some of the districts after Sept. 11, I talked to many Corps members who were not called to go to New York. Many were disappointed because they wished they had the opportunity to help their nation in its time of crisis.

Several Corps members trained in crisis counseling and grief counseling volunteered their services. Many members wrote supportive letters that made their way to me so I could pass them on to the Pentagon chaplain.

In fact, the willingness of the Corps was so great that in many cases the willingness was greater than the need.

This is only a few of the heroic ways the Corps responded to the tragedy of Sept. 11, but it is part of the reason that this Thanksgiving finds me thankful for my life, my family, my friends, my health, my freedom, and the U.S. Army Corps of Engineers.

Way to go, Corps!

(The views expressed 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.)

Letters to the Editor



America Must Never Forget

Who would have known that a small gift I received from a friend who traveled to New York last December would become a symbol and a keepsake I will cherish forever? Who would have known that less than a year later, America's way of life would be altered forever?

The gift? A small metal magnet with the Statue of Liberty and the Empire State Building in the foreground, skyscrapers and the American Flag etched in the background, and the words "New York" proudly inscribed

across the top.

I didn't know at the time when she let me choose from an assortment of magnets that this one would someday hold a special meaning not just for me, but for all of America. A gift to honor all the victims who died in the attacks on the World Trade Center, and their families who grieve.

The terrorist attacks Sept. 11 on the World Trade Center in New York City and the Pentagon in Washington, D.C., plus the downed plane in Pennsylvania, is a tragedy no one could ever have envisioned. How could this possibly happen to the greatest country in the world? And now that is has, what do we do?

First, we must pray. Pray for the victims and their families, pray for the rescue workers and the nurses and doctors working around the clock to help the wounded, and to find and bury the dead. Pray for this great nation that has come under attack by cowards and fanatics. We must pray that our President and leaders will be given the guidance needed to make the right decisions to lead this country back to stability.

After we pray, we must take appropriate action to keep this tragedy from ever repeating itself again on American soil. We must unite as one and squelch the few that would endanger and kill many innocent people to wreak havoc and terror. We must stay strong, be brave, and keep the faith that justice will prevail.

Maybe one day we will be able to board a plane again without the thought and terrifying images of these events coming to mind. Maybe one day we will see the World Trade Center rebuilt, better and stronger than before. Maybe one day there will be peace and no more living in fear of terrorist attacks and threats from third world countries.

Maybe one day our fellow Americans around the world can get on with their lives, but we will never forget the grave injustice done to our great country and many of her proud citizens.

This, America, we must never, ever forget!

Jacquelyn Hopkins
Seattle District

The "Engineer Update" welcomes letters to the editor. Please write to:

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Chief of Engineers command team



Maj. Gen. Hans Van Winkle
Deputy Commanding General



Brig. Gen. Robert Griffin
Director of Civil Works



Brig. Gen. Carl Strock
Director of Military Programs

Flags 'fly' on hard-hats

By Bernard Tate
Headquarters

Soldiers and civilians in the U.S. Army Corps of Engineers are now authorized to display American flags on their protective headgear (hard-hats).

"Stanley Zurweller, a field construction employee in St. Louis District, recently recommended that HQUSACE authorize applying American flag decals or embossments (peel-off/stick-on) on hard-hats worn by the Corps' military and civilian employees," said Frank Trent, Chief of Training and Operations in the Safety and Occupational Health Office. "Section 05.D of EM 385-1-1, the Corps' 'Safety and Health Requirements Manual,' establishes the requirements for wearing and marking hard-hats. Effective immediately, applying an American flag decal or embossment on the rear of hard-hats is authorized and encouraged.

"Basically, this is in response to the recent surge in patriotism, with so many people displaying the flag again in their homes, offices, and cars," said Trent.

According to Trent, the decal or embossment must be located in the rear-center of the hard-hat, half an inch above the required red reflective tape. The decals must not be made of any metallic materials, and the shell of the hard-hat must not be drilled or perforated in any manner to attach flags or any other devices. The flags should measure about 1.25x3.5 inches in size.

Organizations and individuals must obtain their own flag decals or embossments.



Flag decals or embossments are now authorized for wear on the back of Corps hard-hats. (Photo courtesy of the Office of Safety and Occupational Health)

"Basically, we just want everyone to display the flags on their hard-hats in the same manner, and in such a way that it proudly displays the flag," Trent said. He added that this new variation would be incorporated into the next revision of EM 385-1-1, and the change has been coordinated with the directorates of Civil Works and Military Programs.

Trent says that anyone who has any questions may call him at (202) 761-8600, or fax at (202) 761-1369.

CRU soldiers activated

Article by Bernard Tate
Photo by F.T. Eyre
Headquarters

The Contingency Response Unit (CRU) of the U.S. Army Corps of Engineers has mobilized in response to Operation Noble Eagle in Afghanistan. The 39-person unit of Army reservists, which activated October 2000, mobilized for full-time active duty on Oct. 9 at the M.G. Lieber U.S. Army Reserve Center in Alexandria, Va.

"The Corps has tremendous capabilities in its civilian workforce," said Col. David Tebo, CRU commander. "Our soldiers provide strategic planning and battlefield staff capability to the USACE divisions that support the war-fighting commanders-in-chief, and assist in reaching back to the Corps' expertise Stateside."

Besides commanding the CRU, Tebo is chief of the

newly-formed Corps' Mobilization Branch, overseeing all Army Reserve component soldiers mobilized for the Corps under this operation.

On Oct. 15, CRU soldiers deployed from the M.G. Lieber U.S. Army Reserve Center to their duty stations in Corps' offices. Three reservists went to North Atlantic Division (NAD), five to Europe District, three to Pacific Ocean Division (POD), one to Japan District, four to South Atlantic Division (SAD), four to Southwestern Division (SWD), five to the Transatlantic Programs Center, and 14 to Headquarters.

"We are strategic planners working here for the Deputy Chief of Staff for Operations, watch officers in USACE emergency operation centers, and our teams at NAD, POD, SAD, and SWD give those commanders additional capabilities to support the increased operational tempo," said Tebo.



The Contingency Response Unit gathers for a group photo before deploying. On the front row, from left, are Command Sgt. Maj. Robert Dils, the Corps Command Sergeant Major; Lt. Gen. Robert Flowers, Chief of Engineers; Col. David Tebo, CRU Commander; and Col.(P) Michael Eyre, Deputy Commanding General of the 99th Regional Support Command.

Support



For Others

Support for Others

The Corps Is There To Lend A Hand

Bangladeshis train with Corps' IWR

By Anne Sudar
Institute for Water Resources

Imagine Louisiana containing half the population of the U.S., mostly in small villages and farms scattered throughout the low-lying landscape, barely a few meters above sea level. Now picture half of the state underwater every decade or so, due to a combination of Mississippi River flooding and a hurricane striking the delta region.

This is the magnitude of the water resource problems regularly experienced in Bangladesh. The frequent natural hazards and vulnerable geography of Bangladesh are a major impediment to economic development. Any modest progress to alleviate those water resource problems would have large payoffs in raising the socioeconomic status of its people.

Most of Bangladesh is located in the terminal floodplains of three great rivers — the Brahmaputra, Ganges, and Meghna. But only eight percent of those watersheds lie inside Bangladesh. This generates many international upstream/downstream conflicts with its neighbor India, since Bangladesh is at the receiving end of largely unregulated floods during the monsoon season (June-August), and too little water during the hot, dry spring period (March-June).

IWR training

The U.S. Army Corps of Engineers has pitched in to help.

Last June and July, two groups of engineers, scientists, and planners from various ministries in Bangladesh spent two weeks each at the Institute for Water Resources (IWR) at Fort Belvoir, Va. They wanted to learn how Corps' Civil Works planners deal with comparable problems, and what the future might hold for Bangladesh. Their training included field excursions to New Orleans, the eastern shore of Chesapeake Bay, and Richmond, Va.

The training program was "Integrated Water Resource Planning," designed by Dr. Eugene Stakhiv, currently Chief of the Planning and Policy Studies Division of IWR. He had been approached by the Secretary of the Bangladesh Ministry of Water Resources and the Director General of the Water Resources Planning Organization (WARPO). The request was simple — teach us how the U.S. and the Corps approach the ideal of integrated water planning, and show us examples that can be applied in Bangladesh.

The government of Bangladesh paid for this training, and I coordinated the program from start to finish.

The two weeks of training took place mostly at IWR, interspersed with field trips to New Orleans, the Chesapeake Bay, and Richmond.

New Orleans District

The Bangladeshi water resource specialists said that the high point was a study tour of the New Orleans District office and site visits to Corps projects. The geography and problems experienced in New Orleans were familiar to the trainees, and they got to see first-hand how interrelated water problems (flooding, navigation, dredging and disposal, and water supply) are handled in an ecologically sensitive area.

The flood drainage problems of New Orleans and Dhaka (the capital of Bangladesh) are similar, and Bangladesh will soon face navigation maintenance dredging problems and environmental restoration needs on a scale far exceeding New Orleans District.

Of course, while the physical situations are comparable,



A group of Bangladesh engineers, scientists, and water resource planners pause for a group photo while touring the dredge Wheeler. (Photo courtesy of the Institute for Water Resources)

the socioeconomic differences are in stark contrast. And that's the real challenge — how to alleviate the problems of floods, droughts, and pervasive poverty in a developing nation whose very existence is intertwined with the ebb and flow of monsoons and tides.

Considerable progress has been made through the activities of numerous international donors and the continuous presence of the World Bank and the Asian Development Bank. Flooding no longer claims thousands of lives, and Bangladesh can now produce enough food to feed its population. Gradual improvements in water management provide the stability for further economic development and ultimate eradication of poverty.

Delta tours

In New Orleans, the Bangladeshis saw an orderly approach to problem solving, and could envision the endpoint of integrated water resources management. After an overview of New Orleans District and its major areas of operation, the visitors visited two city-operated pump stations and the extensive, still-under-construction Lake Pontchartrain hurricane levee system.

Next they visited the Labranche Wetland Creation project site for a briefing on the Coastal Wetlands Planning and Protection Act program and wetland creation using dredged material.

From there, the group went to the Bonnet Carre Spillway which protects New Orleans, and were briefed on the spillway and the 1997 flood fight which saw the eighth opening of the spillway since it went into operation in 1932. The visitors were impressed with the effectiveness of such a simple structure, and surprised that most of the 7,000 wooden "needles" that prevent water from flowing

through the structure are more than 70 years old.

The first day ended with another stop along the Mississippi River at the construction site for the Davis Pond Freshwater Diversion Project.

On the second day of the New Orleans tour, participants saw technology demonstrations on computer applications for design of flood control and navigation projects, a salinity model for Davis Pond Water Diversion structure, erosion control of river banks, channel stabilization, and a hurricane impact model for coastal Louisiana.

They then toured and had lunch at the dredge Wheeler, where they were intrigued by the size of the vessel and its navigation system.

Classroom training

The training wasn't all tours; there was considerable classroom time as well. The training course at IWR began with the principles of water resource planning, followed by plan formulation and plan evaluation methods.

Other topics of study were risk analysis, flood damage reduction, flood impact analysis, ecosystem restoration, regulatory program principles, shared vision planning/simulation modeling, and cost effectiveness and incremental cost analysis.

The trainees received hands-on instruction in each of the topics using various software developed by IWR and the Hydrologic Engineering Center (HEC). IWR and HEC staff conducted most lectures. Bob Bank from Engineering and Construction Division provided a briefing on the development of the Corps' Civil Works Water Management System.

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Training center upgraded in Ukraine

Article by Alicia Gregory
Photo by Joseph Zaraszczak
Europe District

When the almost 1,000 service members from 21 nations (including about 200 from the U.S.) deployed to Yavoriv Training Center, Ukraine, last July to participate in Peace Shield 2001, they were pleasantly surprised with upgrades to the dilapidated training facilities.

Although it was a tough row to hoe, a team from Europe District bridged the cultural and ideological differences between the Ukrainian and American way of doing business.

"This project is important to the U.S. in supporting our American troops who come here during Partnership For Peace (PFP) training exercises," said Joseph Zaraszczak, project engineer. "It's also important to Ukraine, because we're helping renovate a training area for them. The

projects we're working on elevate the conditions at the Yavoriv Training Center to be more consistent with Western standards, and more suitable for future exercises."

The Yavoriv Training Center is about 288 square kilometers (178.5 square miles). It is a PFP Training Center operated by the Ukrainian Army's Western Operational Command. The site, in western Ukraine near L'viv, has

hosted several annual Peace Shield exercises, a joint training exercise conducted by U.S. Army Europe (USAEUR).

The PFP program was established to enhance the relationship between NATO countries and participating Central and Eastern European countries. Through initiatives like leadership visits, workshops, and security assistance programs, the goal is to increase the stability, promote peace, and expand political and defense cooperation throughout Europe. Joint military exercises are another way that the PFP program accomplishes its mission.

"We've been doing exercises here since 1995," said

Support



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America soldiers stand with soldiers from 21 other countries during the Peace Shield 2001 opening ceremonies.

Lt. Col. Henry Nowak, U.S. Defense Attaché at the U.S. Embassy in Kiev. "During the last two years, and through this effort working with the Army Corps of Engineers, our objective has been to replace the infrastructure, which was built when this area was still the Soviet Union in the 1960s and 1970s. The Corps has been instrumental in upgrading key areas."

Since many of the facilities and infrastructure at the training area were in poor condition, they were identified and nominated as Engineering Related Construction (ERC) projects to improve facilities used by U.S. forces

during exercises, according to project manager Edward Krolkowski.

ERC projects are generally small in scope and routine repair-type construction, but the project in the Ukraine was quite different from what is generally done. There was quite a bit of coordination between the host-nation authorities and the U.S. Defense Attaché Office in Kiev. Also, because the Ukrainian military and contractors were not familiar with U.S. contracting rules and regulations, and the district had to learn local design approvals, permits, and license requirements.

The proposed improvements consisted of upgrades to two barracks, which included installing 23 new showers and repairing four existing ones. It also included building a new laundry facility, improving water and sanitary systems for the buildings, and insect screens on all windows of the buildings.

"The new showers and laundry facility were a great addition because these facilities didn't exist here before USACE performed this work," said Zaraszczak.

Other improvements included replacing a decrepit and inadequate underground high-tension line with about 12.5 kilometers (7.75 miles) of overhead high-tension line, upgrading three transformer substations, building a new transformer substation, and much-needed improvements to the water pumping station.

"The new water pumping system replaced an old water tower, which had virtually no cleaning system and contained stagnant water during periods of non-use that was a health risk for everyone," said Zaraszczak.

Most of the improvements, such as 13 of the shower facilities, the water pumping station improvements, and building the laundry facility, had to be completed before Peace Shield 2001 in July.

Work on the project began in August 1998, with the district participating in a joint survey lead by USAREUR to determine the site's capability as a PFP training site. Once the survey was completed, USAEUR implemented a phased upgrade plan to improve the training area. The Ukraine Army estimated \$2.6 million to complete the assessed upgrades.

"During the next couple of years, through close coordination with the Ukrainian military and based on available funds, construction was chosen that would most benefit the area," said Zaraszczak.

The district worked closely with officials from the Ukraine Army, U.S. European Command (USEUCOM), and USAREUR to explain U.S. construction contracting procedures and processes. About 40 local contractors participated in the pre-bid meeting to explain these processes and procedures.

"All parties learned through the contracting process," said Lt. Cmd. Tony Edmonds, USEUCOM contingency engineer. "They learned our customs and we learned theirs."

The Ukrainian firm, MP Julia LTD, was awarded the upgrade work, with an on-site district project engineer, Zaraszczak, to oversee the work.

"It was important to have a permanent representative during the construction process," said Nowak. "It was also important to have the supervision to make sure the work was done to standards."

"Although the primary objective was to benefit the U.S. troops training in the area, we recognize that a strong engagement benefits all by strengthening relationships between the Partnership For Peace countries who participate," said Edmonds.

"Without the support of the U.S., improvements to this facility wouldn't be possible," said Col. Alexander Pushkar, Chief of Military Preparations of the Western Operative Command, Ukraine Army. "The assistance by the Corps of Engineers assured the success of Peace Shield."

In a note of appreciation, Nowak said that the recently completed work at Yavoriv, "...have not only confirmed the U.S. commitment to forging a long-range partnership between our two nations' armed forces but, more importantly, have demonstrated in practice the principles and standards on which such partnerships must be built."

Bangladesh

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Poplar Island and Richmond

To illustrate the beneficial use of dredged material and ecosystem restoration, the trainees took a boat to the Poplar Island project in Chesapeake Bay. The island is being rebuilt to its historic contours using dredged material, providing both a disposal spot and a restored ecosystem. The Bangladesh visitors marveled at the birds and other wildlife returning to the island, and enjoyed seeing the recreational and commercial vessels that frequent the bay.

A field trip to Richmond concluded the training program. City of Richmond Engineer Charlie Dunn escorted the Bangladeshis to the construction site of the Hampton/McCloy Combined Sewer Overflow Retention Tunnel.

While in Richmond, they also had a close view of the Richmond floodwall, built in partnership with the Corps in 1994. They walked through one floodwall opening and admired the massive swinging gate, which Dunn assured them could be closed by three men.

Friendships

On a personal note, it was impossible to not become friends with the affable Bangladeshis. One of our staff, Erika Hieber, wore native Bangladesh clothes, and Meg Smith invited the first group to her house for dinner. Dr. Nilufa Islam, the lone woman in the first group, shared my apartment for three days to see the lifestyle of an average American woman.

(Anne Sudar is a water resource planner with the Institute of Water Resources.)



Dr. Nilufa Islam (left), lived with Anne Sudar for three days to sample the lifestyle of an average American woman. (Photo courtesy of the Institute of Water Resources)

Eventful year

Continued from page one

have known each other awhile and have worked together before, so we already have a relationship that is very good. He and I have committed to working closely together to do the best job we can for the country and for the Corps.

And I'll say this. It's nice to have someone who's an advocate for the Corps in the Department of the Army and the administration. I consider Mike Parker to be that advocate, and I'm happy he's onboard with us.

Update: *You testified before Congress last March. What else have we done to improve our image and relationships on Capitol Hill?*

Flowers: What we've done is three-fold. First, we've made ourselves available whenever we could to testify and tell the Corps story. Second, we've made a concerted effort to get information out to Congress and their staffs on who we are and what we do. We call that "Corps 101," and we try to make sure we touch base with everybody.

The third thing we've done is working closely with districts and divisions to come up with common messages and themes to send to the administration, Congress, and the public about the Corps' capabilities, the backlog of work we already have on the books, and the work needed to improve the nation's infrastructure. This is a crucial task for setting up the country up for success in the future.

Update: *The Corps experienced a lot of negative articles in the news media before you arrived. What has the Corps done in the past year to improve its image?*

Flowers: We've worked at that in a couple of ways. One thing I've done is made myself available to the media, particularly the press, and in particular the *Washington Post*. I've done editorial boards with their staff, one-on-one conversations with Mike Grunwald, the lead reporter on their Corps stories last year, and we even invited Mike to attend and address our Senior Leaders Conference in Chicago in July. So we've reached out to the media to let them know we're an open organization and we're willing to talk about who we are, what we do, and what's going on.

The second thing, as I mentioned earlier, are these common themes and getting the word out, encouraging our stakeholders and partners and the people we work with to talk about the Corps and let people know who we are.

There are so many good things done by this organization that are seldom talked about and that most people, even in our organization, are not familiar with — we deliver with credibility and excellence, we are stewards of the environment, we take care of water resources, we seek consensus and try to do the right things.

When I speak at town hall meetings, I tell everyone that success is having others talk about the Corps of Engineers in the same terms we talk about ourselves. I think we're having some success by working relationships with our stakeholders and the public, and with our employee's 30-second commercials. When people ask, "What do you do?", our people can respond positively. That reinforces the impression that this is a professional organization, and people are subsequently prone to talk positively about us. Gov. Ridge mentioning the Corps in his speech is the type of thing I'm talking about.

Update: *I'd imagine the Corps' response at the Pentagon and in New York City helped improve our image.*

Flowers: Oh, you're absolutely right. We've gotten letters, e-mails, and phone-calls from all over the country and around the world talking about the Corps' response and thanking us for who we are and what we do.

One of my favorite e-mails is from an employee who had a flat tire. A repairman came to fix the tire, and when he saw that she drove a Corps of Engineers vehicle, he refused to accept her money. He said he thanked the Corps for the job they were doing in New York City and refused to accept her money.

Update: *How will we continue that public information effort?*

Flowers: Having an advocate in the ASA(CW)'s office will help a great deal. I think Mike Parker will be a tremendous asset in getting out the Corps' story.

Also, we're encouraging all employees to be open and to communicate the Corps story. Part of the Campaign

Plan, and the divisions' and districts' operations plans for executing the Campaign Plan, call for us to interface with the public — speakers programs, media days, etc. A concerted effort to talk about who we are and what we do will go a long way toward having other people pick up the message and think of the Corps in positive ways.

We're also making a great effort to reach out to groups who have traditionally opposed the Corps, educate them about who we are and what we do, and involve them in our processes. I think that will help as well.

So we'll build on the momentum that we've gained from the relationships that we've re-worked, our response to the Sept. 11 attacks, etc., and set ourselves up for success. I'm very optimistic.

Update: *You took a trip to Africa. Do you anticipate more work in that region?*

Flowers: Whether we see more work there or not is not the issue. In the past few years, we've seen a growing disparity between the haves and have-nots in the world. When you have that disparity, it's easy for the disadvantaged to see no hope in the future. Then you have people who are ripe recruits for terrorists. I think there's a reason why Osama bin Laden attacked two embassies in Africa in 1998. I think he wanted the U.S. to disengage and leave the playing field open to recruit people to his cause.

One way to take away fertile ground for terrorists is to hold out hope and show that you're willing to help. And with the Corps' capabilities, particularly in water resources, I think that we can be a major player in narrowing that gap between the haves and the have-nots, and in some way create a better atmosphere for peace.

Then there's dispute resolutions. Countries in Africa share many river basins. We have experience in interstate compacts and working international issues, so we can help out there. Water resource planning, river basin planning, training engineers and scientists in water management and disaster relief. We work with the U.S. ambassadors and their staffs, and we also work with the regional commanders in chiefs in executing their theater engagement plans.

Those don't amount to a great deal of expensive work for the Corps, but it will be very worthwhile in maintaining peace and increasing the bond that exists between the African nations and the U.S.

Update: *What are the top two or three things the Corps is doing to support Army Transformation, and what can we expect to see in the next year or so?*

Flowers: Our major contributions are in two areas. The first is in science and technology. Our laboratories are working in a number of areas that will help the Objective Force (the Army of 2032). One is our Topographic Engineering Center where we're working on the Joint Virtual Battlespace. We'll test vehicle designs in virtual reality without putting an actual prototype out on the ground.

Another area is in soils and developing new ways to build airfields to land C-130s or C-17s. We think we'll be able to reduce the time it takes to build an assault landing strip by two-thirds. That will be a key enabler for the Objective Force.

Another exciting thing is that we have the lead for Fort Future, looking at what an Army installation for the Objective Force should look like. We're taking a holistic approach, and as we field the Objective Force we'll also field the installation with the facilities to support and, if necessary, launch the Objective Force when it's needed.

Update: *Is the Corps Vision where you want it?*

Flowers: I was on Lt. Gen. Ballard's transition team in 1996 when we developed the Corps Vision that we operated under during his tenure as Chief of Engineers. I was very comfortable with it, and I didn't want to make any significant changes in that Vision. But I wanted to refresh it. So we brought in people from outside the organization [former members and retirees (both military and civilian), and some of our critics] to look at it.

So the refreshed Vision is a product of my experience and of that team. I'm comfortable with it; I think it emphasizes that we're a public engineering organization, that we're world class. And the Campaign Plan that accompanies the Vision, which will enable us to accomplish the Vision, is sound. We've developed division and district plans to mesh with the Corps' Campaign Plan to achieve the Vision. I think we're moving along in great order, and I'm confident we will maintain that Vision.



"I would appreciate it very much if everyone in the field would please take the time to look me in the eye and earnestly say, 'How's it going?' Then listen to what I have to say."

Update: *You've held a lot of town hall meetings across the Corps, and people ask you a lot of questions. What are the recurring themes you hear from employees?*

Flowers: First of all, I sense a great deal of hope and a great deal of excitement among the workforce.

The second thing is that we have some things that we need to work on. For example, getting the Project Management Business Process set up, and I'm taking personal ownership to make sure that happens. We need to make sure we take care of people. A big part of this is fixing the personnel system, filling our vacancies, putting more people back into the personnel system.

Update: *You often mention heroes during your town hall meetings. Are there one or two heroes who represent the kind of people who work for the Corps?*

Flowers: It would be hard for me to pick out one or two, but I'll try to give you a feel for the type of people who characterize the Corps.

I had an employee come up to me after a town hall meeting in Sacramento, and say that he had a job interview that

Corps Action in New York City



Corps structure specialists carefully assess the wreckage of the World Trade Center. (Photo courtesy of US&R structure specialists)

New York District involved from first moments

In the U.S. Army Corps of Engineers, New York District bore the brunt of the Sept. 11 attack and its aftermath. The district's offices at 26 Federal Plaza are only about six blocks from Ground Zero. Employees were evacuating on foot as the World Trade Center collapsed, and the cloud of smoke and dust came within a block or two of them.

"I'm impressed with the way all Corps employees in the New York area responded to the tragic events of Sept. 11, especially those in New York District, who were directly impacted," said Brig. Gen. M. Stephen Rhoades, Commander of North Atlantic Division. "Using alternate worksites, mobile equipment, and creative solutions, the district overcame many challenges and performed admirably in support of New York City and the Federal Emergency Management Agency (FEMA). The district greatly exceeded my expectations, and was the epitome of Corps dedication and responsiveness."

Dunkirk

As streets jammed with emergency vehicles and people fleeing the collapse of the World Trade Center, the Hudson River became the highway for supplies, victims, and rescuers. And the boats of New York District became both taxis and supply vessels.

Boat crews from Philadelphia and New York districts were in Manhattan for a Coast Guard safety class. After the World Trade Center collapsed, "all the personnel volunteered to help," said Joe Meyers of New York District. "Without a second thought, they placed themselves on duty."

The Corps fleet was the motor vessels *Hocking*, *Hatton*, *Hudson*, *Hayward*, *Gelberman*, *Driftmaster*, and New

York Survey Boat #1. They joined a spontaneous flotilla that has been compared to the evacuation of the British army from Dunkirk in World War II.

"Tugboats, Corps of Engineers boats, water ferry boats, contractor boats, privately-owned boats were all evacuating people from Lower Manhattan," said Rhoades.

Thousands were stranded in Lower Manhattan, unable to get home because of the disaster. "When we arrived, the people on the pier had a deep stare and were covered in dust," said Tony Hans of New York District. "They were afraid to leave and afraid to stay."

The Corps boats ferried more than 3,000 people off the island. Three marinas were set up at Caven's Point, N.J. The first marina was for the uninjured, the second was for the injured, and the third marina was for the critically injured. Busses and trains at Caven's Point took people home.

Resupply

The action worked the other way as well. "On each return trip, the crews took back emergency personnel," said Meyers. The boats ferried more than 200 firefighters and other emergency personnel from New Jersey to Lower Manhattan.

The *Hayward* assisted local fireboats and fire trucks by transporting supplies. Since access to the area was limited, it was difficult to supply the vehicles with fuel and water. "They were passing five-gallon cans by hand," said Josh Daskalakis of New York District. "There was no other way to access the site."

The *Hayward* supplied firefighters with more than 16,000 gallons of fuel and water. The boat crews also transported

Corps employee in WTC when second jet struck

By Wayne Stroupe
Emergency Response Site

"I was pulling into the subway station under the World Trade Center about 9 a.m. that morning," said Joe Seebode of New York District. Seebode was probably the U.S. Army Corps of Engineers employee nearest to the World Trade Center on Sept. 11, the day of the terrorist attack.

"I had meetings at the Port Authority on the 62nd floor at 9:30 a.m.," said Seebode. As the New Jersey-New York Harbor Program Manager, Seebode often visited the Port Authority's offices in the World Trade Center.

"As we pulled into the station, the public address system came on and asked us to exit the station immediately due to smoke conditions," said Seebode. "We were under the World Trade Center Plaza and there was smoke in the building. I put my tie over my face and headed for the exit. There was no panic.

"As we got near the top of the escalator that brings you to ground level from five floors below, we heard what sounded like a bomb going off," Seebode said. "It was the second plane hitting World Trade Center. You certainly felt the explosion. I looked to my left, my normal exit, saw daylight, and began to run. I came out on the Vesey Street (north) side. Debris was falling all around me, and I kept moving north. Only later I grasped how close large pieces of debris were crashing around me.

Debris falling. "The scariest part for me was when I got away from the building about 50 yards," Seebode said. "I ran into a wall of dazed people watching the terrible events unfold. I started yelling at people to get out of there, debris was still falling. I never had time to think if I was going to die. I just kept moving and trying to keep everyone else moving."

Seebode made it to the Federal Building, New York District's location a few blocks away, and found them evacuating. He kept moving north in a wave of people. He was on the corner of Broadway and Worth Street when "I saw the first one fall," he said. "The smoke and dust cloud came within a block or two of us. I couldn't fathom the fact that if this all occurred 10 minutes later, I would have been on the 62nd floor of the World Trade Center.

"People had pocket radios and, by that time, we knew it was a terrorist attack," Seebode said. "People were shocked, and it was complete bedlam. I was lucky to meet four colleagues from the district and we found solace in each other as we traveled together. We were 12 blocks or so farther when the second tower fell.

Message. "My wife knew I was going to the World Trade Center," said Seebode. "With cell phones down, I didn't get a message to her until almost 1 p.m. She saved that answering machine message. Listening to it today is a grim reminder of the shock, disbelief, and horror I experienced that day. I seem to hug my young sons more often these days."

Seebode walked north to Penn Station, but no trains were running. He headed to the waterfront for a ferry, but the lines were too long. So he sat in a coffee shop and, like most of America, watched events unfold on television.

"Col. O'Dowd, the New York district engineer, called me on my cell phone after he heard I was at the World Trade Center," Seebode said. "I tried to make it back to the district office, where he was, to begin to assist in rescue and recovery operations, but wasn't able to get there. I finally made it home around 5 p.m."

The next day Seebode went to Caven Point, the New York District Marine Center in New Jersey. This became the temporary Emergency Operations Center for the district, since their EOC in the district office was closed.

"We were running our boats, ferrying people, equipment, and supplies," Seebode said. "We moved thousands of people both during and after the tragedy, including many



"We heard what sounded like a bomb going off," said Joe Seebode. "It was the second plane hitting the World Trade Center." (Photo courtesy of New York District)

injured during the first few hours after the attack. We did whatever we could to help."

On Sept. 12, Seebode started working on the logistics and emergency permits needed for dredging in the Hudson River to accommodate barges taking debris from the World Trade Center site to the landfill.

"In less than two days, we were ready to go," Seebode said. "A lot of credit goes to our federal, state, and city partners in cutting red tape and working this through telephone calls and hand-shakes. With the estimates of debris we were getting, I knew that to efficiently move the material out of the site would require even more barge sites. Going via truck was not going to work because of the bridges, tunnels, and traffic. As the New Jersey-New York Harbor Program Manager, I had worked on efforts to deepen the harbor and on environmental restoration. I know the contractors and the issues. I knew that the scrap and landfill sites were accessible by water."

On Sept. 14, Seebode became the official Corps liaison to New York City. He was instrumental in several major areas involving Corps expertise, including dredging, barging, and permitting.

Dredging. On Sept. 20, the Corps issued a second permit to begin dredging. Dredging started on Sept. 24 at Pier 6 in the East River, close to Ground Zero. The Corps' work was done under a \$790,500 emergency contract issued to Great Lakes Dredge and Dock Company. Under the contract, more than 55,000 cubic yards of material was moved to create a deeper berth for barges.

"The site has already been used to bring large electrical transformers into Lower Manhattan, and debris barging operations will be implemented shortly," said Seebode.

Since Sept. 11, Corps team members have been on the forefront of the response.

"We're prepared to provide any assistance to New York City and the Federal Emergency Management Agency (FEMA) for the duration," said Seebode. "The Corps' response has been fantastic. We've done everything FEMA and New York City asked."

As a New York City area resident, Seebode is also thankful. "Corps people came here from across the country," he said. "Some put their arms around me, and they felt for this city and this country at the same level we here at Ground Zero felt. I'm so proud of my agency, and my heartfelt thanks goes out to everyone who helped us in our time of need. This is truly esprit-de-corps."

Maps show danger areas

By Justine Barati
Rock Island District

The image on the computer screen shows smoldering heat rising out of the ground where one of the towers of the World Trade Center once stood. Kevin Carlock of the Rock Island District is looking at the map to determine where the hot-spots are located at Ground Zero. This critical information is supplied to U.S. Army Corps of Engineers personnel before they head to the work site.

Geographic Information System (GIS) products are providing rescuers and recovery workers with needed information about dangerous areas at the site of the collapsed World Trade Center. Thermal imagery reveals the location of fires still burning, and pinpoints dangerous hot-spots. These maps are used in safety briefings for rescuers and workers to assist in conducting debris removal operations in the safest manner possible.

Support

"I have every hope what we do will make a difference and help the people on the ground," said Carlock. "The people at the site are the ones really doing the work and we're here to support them."

Carlock and Eric Morrison from Omaha District are working under the Federal Emergency Management Agency's direction to supplement FEMA and New York City's Geographic Information System (GIS) mapping and analysis capabilities.

"There's been a good level of cooperation between the city, the Corps, and FEMA for data and information sharing," said Carlock. "That's what's making this operation work."

GIS analyses are also used to advise the city on ways to efficiently remove debris from the World Trade Center site. Routes and loading and unloading facilities were mapped to streamline debris removal. Volume of debris is also being calculated through GIS analysis. This will assist the city in determining how much debris is being removed. Images are compared daily to determine changes in the site.

Morrison said the most challenging aspect of this project is dealing with the "enormity of the situation. The amount of destruction is just devastating."

High technology

Because the destruction is so extensive, FEMA, the Corps, and other federal agencies are providing the city with maps for fire departments when needed. These maps are used for reference since landmarks formerly located at the World Trade Center are now destroyed. The city and FEMA use the GIS maps and information for security, site planning, and other purposes.

GIS maps are created from aerial photos taken daily at the World Trade Center site. A light detection and ranging system takes photos that scan the area to pinpoint exact elevations. Once these elevations are pinpointed, computer-generated maps are created.

The term Geographic Information System refers to a collection of geo-referenced data, computer hardware, software, analytical techniques, and people that provide information that enable decision makers to evaluate site conditions and determine plans of action.

Debris removal is biggest job of all

By Wayne Stroupe
Waterways Experiment Station

The terrorist attack on the World Trade Center shattered lives, buildings, and the security of America in one horrific morning. As the frantic effort to locate survivors waned, other critical missions surfaced. One of the most challenging in size and complexity is removing the estimated 1.2 million tons of building debris from the World Trade Center complex.

This is one area where the Federal Emergency Management Agency (FEMA) tapped the U.S. Army Corps of Engineers' expertise immediately. FEMA and New York City sought out the Corps because of its years of experience in debris management learned from disaster recovery operations.

"We're providing technical assistance to FEMA and New York City for debris management," said Allen Morse, the Corps' expert in debris management. Morse, from Mobile District, has more than a decade of experience in debris management. He is working out of the FEMA Disaster Field Office on Pier 90 in Manhattan.

"We're accustomed to working hurricanes where the debris covers large areas," said Morse. "When I went to the site, I was in awe of the destruction and piles of debris."

In typical disasters like hurricanes, states request Corps assistance through FEMA. The Corps then either does the debris mission itself or issues contracts to handle the cleanup. However, New York City is one of the few organizations in the world that can handle the amount of debris generated by the World Trade Center terrorist attack.

Unique situation. "We're providing technical assistance to the city in various aspects of debris management," said Morse. "The city has been great to work with. They're real receptive to our suggestions. I'm amazed that they can handle this."

This is a unique situation for debris management for the Corps. The debris is mainly structural debris from the World Trade Center complex, not the trees and residential debris from hurricanes normally faced by the Corps. There is an enormous amount of debris in a relatively small area — two buildings each more than 100 stories tall, plus a couple of smaller buildings, all pancaked in 12 square blocks.

And then there are challenges in transporting such a large amount of debris through one of the busiest cities in the world. One aspect is unique and always at the forefront — the debris is a crime scene and contains both evidence and human remains.

Learning curves. "We've gone through three or four learning curves already," said Morse. "We've never handled anything like this."

Firemen, policemen, construction workers, and other volunteers combed the debris immediately after the terrorist attack in a desperate attempt to locate survivors. After a few rescues in the first couple of days, it became grimly apparent that additional survivors would not be found.

Two weeks after the attack, a small army of men and machines was working at Ground Zero, or the Red Zone, as the World Trade Center site became known. The army included more than 1,000 workers, 240 trucks, and 70 barges moving debris, and more than 260 pieces of heavy equipment.

Corps assistance included helping with contract specifications, setting up and monitoring the debris management process, and conducting efficiency analyses to improve debris removal operations. The Corps helped develop the debris management plan, and a closed landfill on Staten Island was reopened to receive the debris.

On Oct. 1, FEMA assigned a \$125 million mission to the Corps to operate the Staten Island Landfill (Fresh Kills Landfill) to dispose of the debris. The work is expected to run for about nine months.

Under the mission, Phillips and Jordon, Inc. will man-



Rolando Serrano, a structure specialist from Wilmington District, helps New York City policemen pick their way through the wreckage. (Photo courtesy of Corps' US&R structure specialists)

age contractors working the landfill site. Neither the Corps nor P&J will manage the landfill. The city Department of Sanitation and the New York Police Department will manage the landfill to continue raking, sorting, and searching for evidence.

Corps specialists from the World Trade Center Disaster Field Office will oversee the mission until New York District has a team ready to assume the duties.

FEMA will fund the operation as long as the evidence search continues. This mission will improve landfill operations handling the World Trade Center debris while also ensuring methods are in place to recover evidence.

Initially the debris was moved by truck to the landfill site. The Corps suggested improvements, including one-stop stations that could wash-down the trucks, tarp the loads, and document load tickets in one operation.

Since the truck route to the landfill was more than 20 miles, barges were quickly engaged for debris transportation due to the proximity of the Hudson River to both the World Trade Center and landfill sites. Each barge carried about 30 truckloads, offering a great cure for traffic congestion and road wear.

The Corps also assisted with arranging emergency dredging operations at Pier 6, near the World Trade Center, to facilitate additional barge loading facilities. Under the emergency contract with Great Lakes Dredge and Dock Company, 75,000 cubic yards of material was dredged in nine days to allow full loading of the barges.

Salvage. All structural steel from the debris goes to two salvage yards for recycling. The rest of the debris goes to the landfill site where it is examined by hundreds of FBI and New York City law enforcement officers. They examine the debris for any identification (such as credit cards), personal affects, undetected human remains, and any evidence of the airliners' "black boxes."

According to Morse, the debris contains a wide variety of materials. "If you can imagine it, it's probably in there — freon, fuel, and other substances are in the debris. The concrete in the floors and exteriors was lightweight; that was the dust you saw during the collapse."

The debris crews are removing around 10,000 tons a day. "We're making progress," said Morse. "Another 30 days or so and all the loose debris should be done down to ground level."

The city will have a tougher time with debris removal



Allen Morse, the Corps' expert in debris removal, has more than a decade of experience with cleaning up after disasters. (Photo courtesy of New York District)

from the underground levels. A slurry wall holding back the Hudson River from the underground levels must be anchored and heavy equipment use will be limited. Total debris removal could take nine months or longer.

(Wayne Stroupe was part of the Corps' World Trade Center Public Affairs Support Team.)

New York District

Continued from page one

water and antifreeze for the fire trucks, and 1,000 gallons of potable water to the firefighters. This allowed firefighters to keep working without having to leave to refuel or find more water.

At one point, the *Hayward* had a stack of supplies 20 feet wide, 20 feet long, and 10 feet high. Supplies included flashlights, batteries, protective gear, food, water, lanterns, and shovels.

The *Hocking* became the Corps' command vessel on Sept. 11. Less than two hours after the collapse, the *Hocking* crew transported Rhoades to the site to assess the situation and offer Corps assistance.

After the initial evacuation to Caven's Point, more Corps boats joined to support the Corps, FEMA, and the city's transportation and supply needs. These boats were the *Wampanoag*, *Cataumet*, and *Colvin*.

These boats shuttled personnel and dignitaries to various sites. Passengers include the Chief of Engineers, Lt. Gen. Robert Flowers, Congressmen, and many Army staff members.

The supply mission was equally important. "We transport people and supplies like hard-hats and masks for Corps employees," said Walter Grauling of New York District.

New England District

The boats weren't the only Corps people who responded immediately to the attacks on the World Trade Center. An 11-person team from New England District, led by District Engineer Col. Brian Osterndorf, deployed to New York City on Sept. 12. The team of engineers, scientists, and other professionals set up an emergency response and recovery office to offer immediate Corps assistance to New York City.

Year-end requirements

District personnel were spread out in the metropolitan area, many working from temporary locations to accomplish projects and reports necessitated by the end of the fiscal year.

But working from temporary accommodations didn't slow Planning Division. They, like other district sections, overcame lack of telephone and fax service, e-mail, and conference space. They coordinated and implemented plans while meeting at Fort Hamilton, Philadelphia District, and in architect-engineer offices. They worked at home, and met in each other's homes.

Projects

Three teams of project planners and team leaders met Sept. 21 at URS Consultants in Wayne, N.J., to continue formulating plans for major district projects such as flood control at Poplar Brook, Ocean Township, and South River, Middlesex County, N.J., and Fire Island, N.Y.

Pete Blum, chief of Planning Formulation Branch, said the Planning Division also continued the fiscal year 2001 contract program.

"Contract documents were prepared for five separate work orders for work in Vermont for flood control and ecosystem restoration," said Blum. "We also met at Fort Hamilton with the North Atlantic Division Continuing Authorities Program coordinator to discuss year-end strategy."

Several planners in the Environmental Analysis and Plan Formulation Branches also participated in an environmental conference. Leonard Houston, chief of Environmental Analysis Branch, spoke to the Hudson-Delaware chapter of the Society of Environmental Toxicology and Chemistry, Inc., in Newark, N.J., and discussed environmental restoration in the Hudson-Raritan estuary.

District project planners were also spread out in upstate New York where formulation plans were discussed in Albany with the N.Y. State Department of Environmental Conservation for Fulmer, Moyer, and Steele Creeks, Utica,



The M/V Gelberman goes to the aid of New Yorkers on the day of the terrorist attacks. (Photo courtesy of New York District)



Tom Lafontaine steers the M/V Hocking. (Photo courtesy of New York District)

N.Y.

In Poughkeepsie, N.Y., planners met with a consulting engineer to discuss a Section 14 stream bank erosion protection project at Marist College in Dutchess County, N.Y.

The project delivery team for a physical fitness center at McGuire Air Force Base moved forward. While operating at Fort Hamilton, discussion meetings were held with potential contractors to award the contract for the McGuire physical fitness center.

Real estate

The district real estate staff was also busy. They made alternative arrangements for recruiting stations near the Red Zone. According to Stan Nuremburg, one recruiting station near the Red Zone on Broadway was closed for safety reasons. A second recruiting station near City Hall was also affected.

"The real estate mission was to expeditiously make alternative arrangements for the recruiters to keep them operating without major disruptions," said Nuremburg.

North Atlantic Division

Several district offices temporarily co-located with North Atlantic Division (NAD) at Fort Hamilton. The temporary merge with division meant reduced operating office and conference space for both commands, and operating in close quarters with division staff.

Military Programs chaired meetings in the hallway at NAD. Allan Williams, project manager for the McGuire AFB fitness center, improvised by chairing meetings in

any available space. He met with potential contractors outdoors at picnic tables to keep the process moving.

Construction

Construction Division has staffed-up for a \$125 million mission at the Staten Island landfill directed by FEMA. Jim Parks, Acting Chief of Construction, is presently Chief of the New York City Special Projects Team.

"On Oct. 1, we worked with FEMA and our counterparts at the Pier 90 Disaster Field Office to prepare for the transition from what the planning and response teams were doing so that New York District could stand up a team to monitor the current program we've been given," said Parks.

The biggest obstacle was setting up priorities so they could react quickly. In a few days, they were working with Baltimore District on contracting issues, New England District on funding, and also staffed New York District contract specialists. The district sought cost engineering expertise from John Chew and a few people on his staff.

"We sat down and started negotiating with the contractor under this Baltimore District advanced contracting initiative program," said Parks. "In negotiating that information, we were able to issue task orders and get the contractor on site."

"At the landfill we have customers with the Department of Sanitation, NYPD, and the FBI," said Parks. "We're all partners working together and, as far as the involvement of New York District, everything is fairly invisible to everyone."

Overcoming fear

The work that New York District has done meeting the challenges of Sept. 11 is impressive. But for many, the biggest hurdle was fear.

"I went to 26 Federal Plaza yesterday to get files," said Maureen Smith of Engineering. "I felt very safe. I needed to feel safe there." After her visit, Smith felt ready to go back to work.

Lois Borroum of the Executive Office carries an indelible image of a tower collapse. "I'll never forget that," she said. "There was debris flying everywhere." She admits apprehension about returning to New York City, "But that's where my job is, and I have to go back."

"It's time to move on, to do other things," Col. John O'Dowd, New York District Engineer said during a town hall meeting. "The terrorists don't understand us. Things like the attacks on the World Trade Center and Pentagon don't make us quit, don't make us go away. And the way to show them that it doesn't work is to go about our business and not change things. If we do, they win."

O'Dowd acknowledged his own feelings — anger at whoever "came into our town and blew up our buildings and hurt our people," and nervousness when airliners fly overhead. "Each of you is affected by this," O'Dowd said. "You need to find how you can cope." The key is to remember that "you're not alone. It's OK to talk to friends and family. It's OK to feel."

(Vince Elias and Sue Hopkins of New York District, Wayne Stroupe of the Waterways Experiment Station, Justine Barati of Rock Island District, and Bernard Tate of Headquarters all contributed to this article.)



could take care of each other. Look each other in the eye and help each other."

day with another organization that would have paid a lot more money than the Corps. But after thinking about the things he had been involved with, he had decided to stay, because he felt that the Corps made a difference.

I think that sense of service is the greatest thing the Corps offers. I often get asked, "We can't offer big money like the private sector can, so what do we tell people?" Well, I say that you're never going to get rich working for the Corps, but we're always doing something valuable. And we're a real team. Almost every place I've visited in the Corps, it's a cohesive team that comes together to get the job done, and they take a great deal of pride in what they do.

Where else do you see someone receive a 60-year pin? They don't even *make* a 60-year pin, so John Brigance received a 50-year pin and a 10-year pin welded together. He's a hero.

And the emerging leaders, I can talk with them very candidly and openly about things that need to be done. They're hanging in there every day and working hard to make it happen. Those people are heroes.

And when you see people taking care of each other, like

someone who's had a family tragedy and their coworkers are reaching out to help, and donating leave. That's the type of people we have, and they are heroes.

Update: *A slide from the SLC said your goals for Year Two are process improvements, people issues, and continue to encourage training. Please expand on those items, and tell us what you want to see in the next year.*

Flowers: By October 2002, I want the Corps operating on common business practices, so PMBP should be actualized. Every individual should have a relevant training and development plan which will be a contract with the organization.

We will be well on the road to becoming a learning organization where people are training technically, in communication, and in leadership, where we share lessons learned across the organization, shamelessly stealing ideas from each other and other organizations and applying them, if they're the right things to do.

We should be completing timely personnel and finance actions, taking care of our people, filling our vacancies quickly, and bringing in and retaining top-quality people.

If we're successful, by October 2002 we'll have achieved all those or be very close to achieving them.

Update: *You mentioned PMBP. Please expand on that a little, because that will probably affect the greatest number of the people and have the greatest impact.*

Flowers: When I came into this job, one of the first things I looked at was where the Corps was in establishing common business practices across the organization. A team had done some great work moving this along. Unfortunately, it didn't have buy-in across the organization.

So I looked to the Huntsville Engineering Support Center and asked them to take responsibility for pulling this together for the Corps of Engineers. After they worked on it for a couple of months and got solutions from all over the Corps, it became intuitively obvious that I had to take ownership for establishing PMBP across the Corps.

So I've done that. I am now the program manager for PMBP implementation in the Corps. We have a team of 23 individuals from across the Corps who I meet with monthly for in-progress reviews. They're backed up by 53 more people across the Corps, and we have a tight schedule. By 1 Oct. 2002, PMBP will be implemented, including the P-2 (the automation) that goes with it.

This goal is ambitious, and I've asked everyone to buy into this. Right now the project management plans are out on the Web. It's all open to the Corps. I'm requiring all GS-15s and above, and all colonels and above, to comment on what's out there on the Web, so that I know each one is seeing it and is engaged. And everyone else in the Corps is invited to participate, because it will affect them.

Update: *Project execution has been an issue in the past. How are we doing, and what do you foresee?*

Flowers: We have a great record as an institution in executing the funds entrusted to us, and I think we've done a good job. But I also think we can do better. We've put in place a Command Council of senior leaders from Headquarters and the field who will meet periodically, backed up by a Command Planning Group which will support them and the strategic planners for that organization.

I expect that organization to develop the metrics to measure how we execute money, and how well we provide quality service to the public. In the past, our metrics just measured whether we've expended the funds entrusted to us. Now, I think we need to go another step and look at *how* we execute and spend the taxpayers' money, and whether we deliver the best for the money entrusted to us.

Update: *Please describe how the Command Planning Group is organized and what it will do.*

Flowers: The Command Planning Group is a team of 22 people. They support the Command Council and whatever committees the council establishes. At their nucleus is a group of qualified strategic planners (which can be augmented by people from the field), who provide strategic planning expertise to the Command Council and the command so we can horizontally and vertically integrate this organization.

In the past, we've made great progress in horizontal integration of the Corps with our Regional Business Centers, etc. Now we'll take it to the next level, and that's to vertically integrate Headquarters with the field so that we're all

working toward the same ends, have the same themes, and are as responsive down as we are up.

Update: *The Everglades is our largest environmental restoration ever. What is its status? How large a role for environmental work do you see in the Corps' future?*

Flowers: The Everglades is a tough mission. It's the first time anyone has been directed to restore a complete ecosystem, and that's a tall order. We're working through a management structure, horizontally and vertically integrated, to pull this off. We want identifiable, responsive people at Headquarters, division, and district to work together to solve problems as we restore the Everglades.

I'm confident we'll accomplish this mission. That's not to say there won't be tough times. There will be. But I think we'll work our way through that. It requires a unique relationship with our partner, the water district in Florida, and a unique relationship with the congressional leadership and the administration. Those are things we will learn as we work our way through this. But by putting the right people in place, establishing communications early, and having a way to get everyone involved, I think we'll set ourselves up for success. And we've done that.

Can the Corps expect to see more of this kind of mission in the future? I think so. In a survey some months ago, 66 percent of the American public said the environment was a key issue for them, and that it's something the government should see to. So I think you'll see more of it.

Currently, projects with environmental restoration or environmental enhancement as a key feature top our civil works program. Twenty percent of our civil works budget is in the environmental area now, and that grows every year. So I think we'll see more environmental work come our way because that's what the public wants. We'll continue our traditional missions (navigation, flood control, disaster response), but I think environmental enhancement and restoration will become key missions for the Corps.

Update: *How about the nation's infrastructure? The American Society of Civil Engineers gave it a D-plus, and it will cost \$1.3 trillion to fix. What does that mean for us?*

Flowers: The nation's infrastructure is in rough shape. Our population has increased during the past 20-25 years, but investment in infrastructure has declined. Unless you change that, you're going to reach a crisis point. I think we're getting close to that, as evidenced by the grade the ASCE gave the infrastructure, and that \$1.3 trillion price-tag to fix it during the next five years.

Inland waterways was one feature of infrastructure they assessed, and it also got a D-plus. So I think repairing the locks and dams, the navigation channels, providing water supply and water quality will be key things that country must invest in to maintain quality of life and to set the country up for economic success in the future.

As those investments are made by the country, the Corps will be involved as the public engineer to actualize that investment. I think there's a bright future for the Corps in that, and that's the point I try to emphasize in the town hall meetings. The nation has always turned to the Corps of Engineers when it's had a tough mission. This will be a tough mission, and I think they'll turn to us again.

Update: *Besides what we've mentioned, do you have any other priorities for the year ahead?*

Flowers: Absolutely. My priority is for all members of the U.S. Army Corps of Engineers to have fun. Some of the best times I've had in this job are when I've been able to walk around, stroll into peoples' cubicles, and talk to them about the Corps, who they are, what they do, and their families.

I enjoy getting up every morning and coming to work, and I'd like every employee to feel the same way. If people have ideas on how we can have more fun as an organization, I'm willing to listen and implement those ideas.

Update: *Any final thoughts?*

Flowers: I would appreciate it if everyone in the field would take care of each other. There are no better people to assess how people are feeling than those around them. Look each other in the eye and earnestly say "How's it going?" Then listen and help each other. If we're doing that across the organization, then that cohesiveness that's necessary for us to do great service for the country will be there, and we'll pull together as a team and get the tough jobs done. That's what this organization is all about.

D.C. schools

Baltimore District upgrades, modernizes schools in nation's capital

By Mary Beth Thompson
Baltimore District

Each of the District of Columbia's 147 public schools started on schedule for the fourth school year in a row. That is a good-news story, even though no news media outlet carried the story.

Serious structural and safety problems had often delayed the school-year start in the past. When that happened again in 1997, D.C. Public Schools (DCPS), asked the U.S. Army Corps of Engineers for help. Congress approved the mission, and Baltimore District began to upgrade and modernize schools in the nation's capital in early 1998.

Since then, the Corps has worked in every school and completed thousands of projects. Besides repairs and improvements for near-term needs, major long-range whole-school modernization projects are planned for the entire school inventory. Renovations or replacements will bring DCPS facilities to current standards. Construction has begun at five projects. Four more are scheduled to start this fall, and 10 are currently in planning and design.

Baltimore District also continues to help DCPS reorganize its facilities management office to develop its own in-house capabilities.

The good fight

When the schools opened as scheduled on Sept. 4, Baltimore District employees who work on the DCPS program knew they had once again fought the good fight and won. Employees on the front lines in Washington are supported by staff members in the Baltimore headquarters who put the tools in their hands.

From the Baltimore offices, projects are designed and managed, scopes of work written, environmental needs determined, real estate titles searched, historic preservation requirements determined, measures to support small business taken, and construction contracts negotiated.

As they work on the DCPS program, the team members in Baltimore face challenges similar to those faced by Washington team members. The tasks are daunting, the coordination is extensive, and time is critical.

Daunting tasks

"When we first started down there, it looked like 'Mission Impossible' trying to renovate more than a 100 schools," said Rick Seufert of Construction Division.

Rick Calloway, also of Construction, described the program as massive and cited the large number of contracts that have been put in place and managed for DCPS. "It takes the same amount of paperwork to do a little job as a big job," he said. "You have to get very efficient."

Nearly half of the 95 sole-source offering letters Baltimore District sent to the U.S. Small Business Administration last year were for the DCPS program, according to Penny Cincibus of the Small Business Office. That fact hints at the size of the program and its importance to small and disadvantaged businesses in the region.

Donald Holland, Engineering Division, writes scopes of work for schools where students are often present, a situation that is not typical of other Corps programs. "You just have to think more about it," he said. For example, specifications must include instructions to the contractor to put up signs to redirect students, work in certain areas only at certain times, minimize noise, and otherwise adjust to the school's needs.

Support



For Others



Asbestos abatement is an important part of Baltimore District's work in the Washington, D.C., schools. (Photo courtesy of Baltimore District)

Time critical

"It's compressed work schedules throughout the entire process—design and construction," Holland said.

Planning Division's Mark Baker described the period when he started historical research for school modernization projects. "We were awarding construction contracts literally within a matter of days, and so for the first group of schools, there was a time crunch to figure out which schools were historic."

At times Baltimore employees are asked to rush a project, but never learn why. "It's like the skillet gets hot, but you don't know why the fire was turned on," Holland said.

Accommodating the school calendar also adds time pressure to the process. "A lot of the work has to be done when the children are not in school," said Cincibus.

Extensive coordination

The DCPS program requires coordination of impressive proportions. The various elements of Baltimore District must connect internally as well as with other federal agencies, several arms of the D.C. government, and hundreds of contractors. "I think the biggest challenge is coordination among all the agencies," said Melissa Jones of Real Estate Division.

It is not unusual for the Corps to work with the National Park Service, the Small Business Administration, the Environmental Protection Agency, architectural and engineering firms, and large and small contractors, all at the same time.

Another unusual facet to the program is the coordination with the Washington, D.C., city government. Baltimore District works with DCPS officials, staffs in the schools, the mayor's office, D.C. Parks and Recreation, the Historic Preservation Office, the D.C. Office of the Surveyor, D.C. Consumer and Regulatory Affairs, and the D.C. Health Department, among others.

"When you're working with another bureaucracy, particularly like the D.C. schools system, it takes a while to get things done," said Art Star of Real Estate. "Partly, you have to figure out how they do business."

Engineering Division's Tom Winkel commented that there's a litany of people to match up with and a lot of meetings to attend. "It's tough getting all the people

together at the same time," he said.

The Baltimore part of the team is developing helpful tools for the DCPS program.

Tools

Baker, a historian, is doing a survey of D.C. schools to determine which ones are historic. Starr, an attorney, drafted a joint-use agreement to cover situations in which DCPS property is shared with the city's Parks and Recreation department. Working together, Construction, Contracting and Counsel have removed some bumps from the technical evaluation process.

Realty specialists are putting together comprehensive books for each individual school. The binders contain aerial photographs, tax maps, zoning information, ownership documents, transfers of jurisdiction, leases, rights of way, use agreements — all the collected real estate data needed to plan, design, and build new schools or renovate existing ones.

The Small Business Office conducted work-fairs in Washington in an effort to find small contractors that could do the work in the time allowed and meet both federal regulations and D.C. government requirements.

Almost to a person, Baltimore employees interviewed said that flexibility is the key for working on the DCPS program. "You need to kind of roll with the punches," Jones said. "You can bang your head against the wall, or you can just accept that this is the direction of the day, and that's where we're marching at the moment."

Seufert said a Washington co-worker once told him, "You remind me of a grandfather," the man said. "You come in and get the stuff started. Then when the grandkid starts screaming, you hand 'em back and walk away."

Although the employees who work in Baltimore to support the DCPS program may not feel the same sense of immediacy their counterparts in Washington do, they do experience many of the program's unusual pressures. And in the end, everyone shares the same goals.

"One thing you see is the deteriorated condition of the schools," Winkel said. "Satisfaction comes in knowing you're helping give the students a better school."

Cincibus said, "I'd feel proud to see it one day in the Washington news that the Corps did make a profound change in the right direction so that in the future, the children of D.C. will have a decent place to go to school."

DoE nuke transporters get training site

By Jennifer Wilson
Little Rock District

In just 24 months, the Department of Energy's (DoE) Transportation Safeguards Training Center doubled in size and went from one employee to 62.

"If projections hold true, we'll double in size again in the next 24 months," said Lynn Pincumbe, training center manager. "The only constant here is change, and the Corps of Engineers has met our needs and kept up with all of our changes."

DoE's training center is outside of Fort Smith, Ark., at the Arkansas-Oklahoma state line on Fort Chaffee, Ark., which closed in the 1995 round of base closures.

The center trains federal agents who provide security for DoE-owned nuclear weapons and special nuclear material transported across the country.

"This facility is mission-essential for DoE," said Mike Gillespie, the on-site training manager. "We have 57 percent of the work force eligible for or retiring in the next three to five years. We must train new agent candidates to replace retirees, and we must enlarge the agent work force to meet new mission requirements. This facility is very valuable. Our agents in the field are a little less dependent on the facility, but it's also used for the senior agent's refresher and support training on a continual basis."

DoE began operating a satellite training center at Chaffee in 1985.

Good location

"It wasn't meant to be a permanent training site," Pincumbe said. "There was one employee, and minimal facilities." But about the time base closures hit Chaffee, DoE faced increasing restrictions at their main training site outside of Albuquerque, N.M.

"We recognized that Chaffee was centrally located between our regional facilities in Amarillo, Texas; Oak Ridge, Tenn.; and Albuquerque," said Pincumbe. "We already had a presence here; we just needed to develop it."

That's when Little Rock District was called to help. The district had an indefinite delivery/indefinite quantity job order contract (JOC) with Del Jen, Inc., to service organizations that remained at Fort Chaffee. Recently, Del-Jen completed the local JOC. Now they will be working at Chaffee through the district's regional JOC.

"We ask for things that others don't — 13-foot fences, special conduits for equipment, vault rooms, extensive security measures," Pincumbe said. "They're strange requests, and I can't imagine trying to handle all the construction issues associated with these by myself. The Corps has been our saving grace here."

Pincumbe said she appreciates working with another federal agency that understands and operates under similar regulations and bureaucracy. She said Little Rock District also is quick to pull from other expertise areas within the Corps when they don't have a particular skill in-house.

Heavy-duty training

"I don't have to be concerned with extensive overhead charges, either," Pincumbe said. "Little Rock District is affordable, and they do quality work."

DoE recruits are trained to the level of a police SWAT team. They have physical requirements to meet such as



Recruits at the Transportation Safeguards Training Center are trained to the same standards as a police SWAT team. (Photo courtesy of Little Rock District)



The Transportation Safeguards Training Center has state-of-the-art classroom and computer facilities. (Photos courtesy of Little Rock District)



a timed run and qualifying with a handgun, and they must complete computer-based classes on safety and hazardous material handling.

They also must learn to drive tractor-trailer rigs and obtain a commercial driver's license. DoE's sensitive cargo is transferred in these 18-wheelers.

"We have specific requirements for each of our facilities, and we get our users involved in their design," Pincumbe said. "When we design a mechanics bay, our mechanics are consulted. If we're designing an arms vault, our armor specialists are consulted. That way each facility is made to the specifications of the users. This would not be possible without the Corps."

Service

Joe Holden, the district's representative at Chaffee, and representatives from Del-Jen, Inc., meet weekly with Pincumbe to discuss project issues and changes. But it's the ongoing service that Pincumbe appreciates.

"Joe doesn't just come by once a week," she said. "He drops by throughout the week. He watches the work, and he's constantly asking if we're pleased with the work. If we aren't, he works with the contractor and us to fix it."

Holden said Del Jen, Inc. is one reason that DoE receives such outstanding customer service.

"They maintain an office on-post, so they're able to provide immediate assistance and consultation," Holden said. "DoE changes their minds almost daily because

of their changing mission requirements. If we had to wait for a contractor to travel to the site for meetings, we couldn't be as responsive or involved."

That continuing level of customer service gives Pincumbe confidence to plan for the future.

"I keep a wish list of things I want to do here," she said. "As long as we have the list in place and prioritized, when the money comes in from our headquarters all I have to do is attach it to a project. Our management knows when they give us money, we'll spend it wisely and quickly."

Work is progressing well on an exercise control center at the site, which includes main offices, a reception area, state-of-the-art conference center, and a monitoring area for activities at the campus.

Future plans

Future plans call for building a firing range where recruits can practice their marksmanship, and a skid pad where they can practice their driving skills. A simulations building, running track, and hand-to-hand combat training building also are on Pincumbe's wish list.

"This is the only federal training center for agents who move special nuclear material," Pincumbe said. "Managers at other DoE facilities are noticing what's happening at Fort Chaffee. They say whatever we have going on here with the Corps and the contractors, is definitely working. Customer service and the ability to change as the mission changes is necessary at all our facilities."

Support for Others

The Corps Is There To Lend A Hand



Kosovo kids get school supplies, toys, clothes from halfway around the world

By Grant Sattler
Europe District

Children in a remote Kosovo mountain village recently received several vanloads of clothing, toys, and school supplies with a return address from halfway around the world.

The materials were gifts from citizens of Humble, League City, and Kingwood, all in Texas. The donated items were flown to Germany by Continental Airlines, and transferred into military supply channels by Europe District in Wiesbaden, Germany, for the trip to Macedonia and Camp Bondsteel, Kosovo.

Army engineers with Task Force Falcon distributed the goods on Sept. 18 to Albanian pupils at their adopted school in Izance, Kosovo. Many residents are still rebuilding their homes in this war-torn province.

Mike deMasi, project engineer from Galveston District, was the driving force behind the initiative, but "It was a real team effort," deMasi said.

When deMasi left Camp Bondsteel last July after a four-month tour of duty as a civil engineer, he did not leave behind his concern for the local children. He had



Engineer soldiers with Task Force Falcon deliver clothing, toys, and school supplies to the children of Osman Mani Primary School in a remote mountain village in Kosovo. (Photo courtesy of Europe District)

volunteered for duty in the Balkans to get varied work experience with the Corps.

"I was also hoping to assist with some of the rebuilding of the local communities," said deMasi. He found his chance working with Army Civil Affairs (CA) soldiers on repair projects for a number of schools, including the remote Osman Mani Primary School.

"I had quite a bit of contact with the Kosovo children while working with CA," said deMasi, a father of three children of his own. "The kids always wanted to talk and learn a few new English words."

DeMasi, a native of Humble, e-mailed his family telling them about the school and the children there. "Then they asked

to see pictures, so I created a small Website with the school and some pictures of the children.

"I asked them to clean out their closets and send me the stuff for the kids and their families," deMasi said. "My wife and sisters came up with a number of boxes."

Then his mother, Sally deMasi, presented the idea to her church organization. The First United Methodist Church in Humble and the Kingwood Presbyterian Church congregations came through with almost 1,500 pounds of donated items.

"I had envisioned mailing a few boxes," deMasi said. "The problem was how to get all the stuff to Kosovo."

That is where Lamar Berry, a Continental Airlines employee, and the airline's shipping department stepped in to move the goods to Europe. There, Europe District's Tom Miniard cleared the items through customs and moved the two pallets into military supply channels for forward movement to Kosovo.

Once there, engineer soldiers working with the Directorate of Public Works of Task Force Falcon delivered the goods to the village. The children thanked them, and America, with flowers, a song, and a poem.

HR Corner

Plenty of long-term training available

By Jerry Liebes
Headquarters

People tell us that one of the most personally and professionally significant opportunities the U.S. Army Corps of Engineers offers is its Long Term Training (LTT) programs. These programs enable participants to obtain advanced education, and often advanced degrees. There are actually two LTT programs—Headquarters-sponsored LTT, and Army-sponsored Competitive Professional Development (CPD). CPD includes other opportunities, such as short-term training, developmental assignments, and Training With Industry.

Let's look at CPD first. CPD is only for military-funded people. The Army will *not* fund GE folks, although we continue to lobby for this change. All interested military-funded careerists should apply for CPD, so they can compete for Army funding rather than Corps funding.

But civil-funded employees (and military-funded employees not covered under an Army-recognized career program) may apply for Headquarters-sponsored LTT. Guidance on CPD opportunities is provided in the Army Civilian Training, Education, and Development catalog. The requirements and opportunities are different for each career program. For more information, go to <http://cpol.army.mil/train/catalog/ch03gen.html>.

Last year, 71 CP-18 (Engineers and Scientists, Resources, and Construction) careerists applied, and 66 were funded. Additionally, a smaller number of careerists in other programs were funded. So while competitive, the program is not impossible. All interested applicants are encouraged to apply, for a very simple reason—If you don't compete, you can't be selected.

Under Headquarters LTT, master's-level education receives preference over doctoral-level programs. Generally, if someone already has an advanced degree, they

are less competitive than someone who does not. However, we do not turn applications away, because special organization needs may justify advanced education at the doctoral level. Each career program's functional officials make these decisions.

Recently, the CP-18 Functional Chief's Representative has not approved second master's degree programs or doctoral programs. It is also unlikely that the Corps' LTT panel will endorse second master's or doctoral programs. But again, as with CPD, if you don't apply you can't be selected.

There are several types of Headquarters-sponsored LTT—the Mission Related Graduate Program (MRGP), the Project Management Program (PMP), the Graduate Fellowship in Water Resources and Environmental Law (WREL) program, and the Coastal Engineering Education Program (CEEP).

MRGP—This program provides an opportunity for graduate level study in an academic discipline that is directly related to accomplishing the Corps mission. Last year, 14 Corps members began this program.

PMP—This program is intended for program/project managers or members scheduled to be program/project managers. Specialized and program experience for PMP is the same as required for the Mission Related Graduate Program (MRGP).

This program consists of full-time undergraduate or graduate level study at a college or university that provides education in project management and related fields. It is designed to provide program and project managers with a strong, fundamental education in the human, organizational, and technical skills necessary for quality management of Corps projects.

WREL—This program is for Corps attorneys. It consists of a full calendar year of study (not an academic year), conducted at the George Washington University

(National Law Center) in Washington, D.C. Besides the course work, about 10 hours per week will be spent in the Office of Chief Counsel at Headquarters. Last year, two Corps members began this program.

CEEP—This program is offered every three years and is designed to provide coastal engineering specialists with an academically strong, fundamental education for solving modern problems. Program graduates will have the fundamental knowledge and abilities to plan, design, construct, and operate coastal projects.

The program is 12 months of academic study from Texas A&M University—three months on campus at College Station, Texas, and nine months at the Coastal Engineering Research Center (CERC). The curriculum at College Station includes 15 semester hours in higher mathematics, ocean wave mechanics, marine dredging, ports and harbors, seminar, and coastal problems.

The curriculum at CERC includes 22 semester hours in physical oceanography, coastal engineering, hydromechanics, theory of fluid mechanics models, coastal sediment processes, seminar, physical modeling, and coastal field measurements.

It also includes hands-on laboratory work, numerical modeling, and field measurement and analysis during three weeks at CERC's Field Research Facility in Duck, N.C. This program will be offered again in fiscal year 2003.

Additional information is available in ER 350-1-416, available on the Web at www.usace.army.mil/inet/usace-docs/eng-regs/er350-1-416/entire.pdf. Suspenses for these are other programs are available on the Corps' training calendar of suspenses, which is updated quarterly, and available at www.hq.usace.army.mil/cehr/D/train%20develop/CAL-01.PDF.

Future *HR Corner* articles will feature interviews with program participants.

Around the Corps

Fort Wainwright hospital

Alaska District has issued a request for proposals to build the Bassett Army replacement hospital at Fort Wainwright, Alaska. Proposals are due Dec. 10. The district will award the contract next January 2002 with a target for construction start next summer. Completion will be 2006.

The 259,000-square-foot Bassett Army replacement hospital was designed for a sub-arctic climate. It accommodates changes in medical care, and the increasing use of automation equipment in both the clinical and administrative areas. The new hospital will be built to operate through an extreme earthquake with redundant fire protection and heating systems and an emergency central energy plant.

The replacement hospital project is Phase II of a four-phase program. Phase I, building a project office and site development, was completed last year. Phase III will install medical and communications equipment, and Phase IV will demolish the existing hospital and an adjacent administrative building. The cost for all four phases, including the government cost for administering the contracts, is \$215 million.



An architect's model shows how Bassett Army Hospital will look. (Photo courtesy of Alaska District)

Fort Sam Houston

The old Brooke Army Medical Center at Fort Sam Houston, Texas, is vacant and in bad need of repair. Nearby, two Spanish Colonial Revival buildings, also once housing medical facilities, are also deteriorating. But thanks to an unprecedented partnership between private developers and the Army, all three historic buildings will receive a facelift at no charge to the government.

The deal was sealed this summer between Fort Sam Houston, Roy F. Weston, Inc. and Orion Partners, Inc.. Fort Worth District completed leasing arrangements.

Under the 50-year lease, Weston and Orion will renovate the buildings after securing tenant leases. Cost of restoration is estimated at about \$46.3 million. The Army will retain ownership, and will receive 46 percent of the rent.

District real estate personnel worked with Weston/Orion representatives to negotiate a business development plan and the 50-year lease signed by the Army June 21.

"With this the first of its kind in the Army, it took a lot of man-hours and effort by all parties to develop the template for this concept of enhanced use leasing," said Hyla Head, chief of Real Estate Division. "We've already been contacted by other Corps districts and installations that are gearing up to do the same thing."

Old commissary, new offices

New England District will assist Hanscom Air Force Base in moving personnel from offices off base by converting the existing commissary and a large warehouse area into office space.

Hanscom will save \$4.8 million in life-cycle costs by moving three System Program Offices (SPOs) within the Electronic Systems Center (ESC) from the MITRE Building in Bedford, Mass. to Building 1614.

The renovation will include interior demolition, asbestos removal, utility upgrades, site work, landscaping, fire protection/detection systems, Self Contained Information Facility space, laboratory space, an energy

management system, roof repair, communications, and all other required supporting facilities.

The renovation project will be performed under the supervision of a Corps of Engineers inspector to assure compliance with contract requirements.

Faulkner Island

New England District, Congressmen, and the public participated in an open house Sept. 8-9 to mark the successful completion of Phase I of the Faulkner Island Shore Protection Project.

The \$2.1 million project, which protects the shore, protects a historical lighthouse, and provides additional habitat to nesting common terns, was a partnership between the district and the U.S. Fish and Wildlife Service. The open house marked the first time the public has been allowed on Faulkner Island since the project began.



The Faulkner Island Shore Protection Project will help protect this lighthouse. (Photo Courtesy of New England District)

stone revetment along the north point, then along the East Side near the lighthouse. Slope stabilization was required above the revetment near the lighthouse.

Phase 2 will extend the protection further south along the eastern shoreline to protect remaining areas and tie into a stable shoreline location. The design of Phase 2 will be based on the results of the tern nesting studies.

Mather Building

"This is probably the greatest day in my life," Dr. Bryant Mather said in front of the newly-named Katharine and Bryant Mather Building on Sept. 25. That's quite a statement coming from a man who, with his wife, is recognized internationally for the contributions they made to cement, concrete, and concrete materials technology.

Katharine and Bryant Mather had more than 100 years of federal service between them, most at the Engineer Research and Development Center (ERDC). The dedication of the former Structures Laboratory building, where the two spent most of their career, was a way for ERDC to recognize the technical accomplishments of this couple.

Dr. Katharine Mather retired in 1982, after 40 years of federal service. She was a member of several technical societies, and received the highest awards for research from the American Concrete Institute and the American Society of Testing and Materials.

Dr. Bryant Mather is Director Emeritus of the Structures Laboratory, after retiring in February 2000 with more than 59 years of federal service, all with the Corps of Engineers.

He was a charter member of the Senior Executive Service, and remained a member for more than 20 years. He has authored or co-authored almost 800 technical reports and papers. He is a member and past president of both the American Concrete Institute and the American Society for Testing and Materials, and is currently chairman of numerous technical committees.

ASCE awards

The Virginia Section of the American Society of Civil Engineers (ASCE) held an awards ceremony as part of ASCE's 150th anniversary during an Engineers' Conference in Virginia Beach on Sept. 27.

Norfolk District received a special commendation for more than 120 years of quality, cost-effective construction and maintenance of water resources and military and environmental projects in Virginia.

Virginia Section President Brad Price also presented special commendations to Col. David Hansen, Norfolk District Engineer, and William Sorrentino and James Thommasson, two senior district leaders.

Safety awards

Mississippi Valley Division (MVD) received two safety awards from the World Safety Organization (WSO) the 15th International Environmental Health and Safety Conference on Sept. 12 in Waco, Texas.

Dr. Lon McDaniel, chief executive officer, presented the WSO Concerned Company/Corporation Award, and the WSO Concerned Organization Award to MVD, citing its effort in protecting people, property, resources, and the environment, and its dedication to make safety a way of life.

MVD has 5,500-plus employees. Their lost-time accident frequency rate for FY00 was 0.93 per 200,000 man-hours, compared to private industry's rate of 2.8. The fatality rate was 0.02 with only one fatal accident, an automobile accident.

More significant was the contractor employees lost time accident frequency rate. MVD contractors had a lost-time accident rate of 0.68 compared to the construction industry's rate of 4.1. No contractor employee was fatally injured in the past two years.

The MVD safety program includes recreational and water safety for the public. Last year 10 people drowned on the 33 reservoirs and 29 navigational lock and dam pools operated by MVD. This compares to the 700-800 drownings each year nationally. Statistically, MVD had 0.35 drownings per million visitor days. The overall Corps-wide rate was 0.85 per million visitor days.

Cancer walk

New England District is used to battles. Whether they fight floods or other natural disasters, they are always prepared for a challenge. This year, district members took on a battle not so easily won – the battle against cancer.

With pledges totaling about \$4,000, about 15 employees, friends, and relatives gathered in Worcester, Mass., joined thousands of other walkers Sept. 3 for the Walk to Cure Cancer. The five-mile jaunt began on the University of Massachusetts in Worcester and circled part of Lake Quinsigamond in Shrewsbury, Mass.

According to the American Cancer Society, about 553,400 Americans will die of cancer this year, more than 1,500 people a day. Cancer is the cause of death in one out of every four people in the U.S.

For some district walkers the disease hit close to home. "My godmother succumbed to cancer more than 20 years ago at the age of 47, and I have known many others who have been devastated by this disease," said Carol Charette of Engineering/Planning. "One of the former Kansas City District Engineers and his secretary, as well as other friends relatives and acquaintances."

According to Bud Taylor, Project Management and district organizer. "We doubled our goal in pledges with about two-thirds of the goal of walkers. We'll see if we can raise the bar next year by getting 30 walkers and raising \$5,000."



Divers search for wrecked steamboats

By Jim Pogue
Memphis District

The mid-19th century was a time when highways and railroads were rare in Arkansas. Most settlers relied on steamboats plying the Arkansas, St. Francis, and White rivers to bring them supplies and to carry their crops and goods to other markets.

By 1860, more than a dozen vessels made regular runs between White River ports and Memphis, New Orleans, and other river cities. They captured the essence of comfort and elegance of the time with their finely carpeted cabins, their bands and calliopes, and their tables laid with shining silver, fine china, and linen.

It was also a time before the U.S. Army Corps of Engineers regularly dredged and pulled snags from Arkansas' rivers. As a result, steamboats often ran aground on hidden shoals, or had their thin hulls ripped out by submerged tree trunks and other obstructions. Boiler explosions and fires also claimed many of the early steamboats. The worst steamboat disaster on the White River occurred in 1854 when the 134-foot-long *Caroline* caught fire and sank, killing about 45 people.

When the Civil War swept across our nation in 1861, both sides used the rivers to transport troops and military supplies to battlefields throughout the region. Warships and cargo vessels alike were lost either through military action, or by scuttling to blockade use of the waterways by the other side.

During the decades, time has erased many of these steamboat losses. But today, Memphis District has taken on the difficult task of locating and identifying historic steamboat wrecks on the White River.

Archeologist Erwin Roemer supports the district's protection efforts.

"Sunken steamboats are another form of environmental resources, and we're looking for ways to better understand and protect them in relation to Corps projects like maintenance dredging," Roemer said. "In a sense, it's just like protecting endangered species or wetlands."

And finding and protecting the wrecks is a vital concern. Memphis District is conducting the Lower White River Navigation Improvement Study, and researchers have identified at least 55 wrecks on the White River. Dredging is an important tool in keeping the waterway open for commercial navigation, and Roemer said it is important to know where these shipwrecks are to make every effort to avoid disturbing them with dredging.

"We want to locate and identify the wrecks," he said. "If we can't avoid disturbing them, other actions like recovering artifacts or even underwater excavation might be appropriate. But that's not the first choice."

The National Historic Preservation Act and the Abandoned Shipwreck Act largely govern the current work. In some cases, however, the shipwrecks are anything but abandoned.

"In the case of Civil War vessels, ownership is pretty clear," said Roemer. "Union vessels remain the property of the U.S. Navy, and Confederate vessels are the property of the General Services Administration. Otherwise, Arkansas usually



Nails and a flame bed support are typical artifacts recovered from the wrecked steamboats. (Photos courtesy of Memphis District)

owns abandoned historic watercraft."

Because of this, the specific locations of the four or five wreck sites currently under investigation have not been announced. Roemer said salvage work or research fieldwork by private individuals may be permitted in some cases, but significant coordination with federal or state governments is required.

Corps river survey boats using remote sensing equipment often provide the first

clue to a potential wreck site. Large metallic pieces like boilers, iron plating, or paddlewheel machinery give a strong return on magnetometer survey equipment. The district then contracts with a commercial marine archeology firm employing professional divers to do the detailed survey and site-specific fieldwork.

Mike Krivor of Panamerican Consultants, Inc., is in charge of the current work on the White River. His firm has dived on

wrecks on many inland rivers, harbors in the Caribbean, and in a variety of other locations around the globe. Much of this work has been sponsored by the Corps.

"Diving conditions in river systems of the southeastern U.S. are difficult," Krivor said. "Typically there's zero visibility and we confront the ever-present factors of drifting debris and fluctuating river levels and currents."

Divers working off small barges using bottled air supplied by a lifeline usually perform dive operations. Roemer said the archeologist-divers are in constant communication with members of the support team on the barge who record their findings.

Artifacts sampled are generally small and not impressive by most people's standards. They often include objects like spikes, nails, or bolts used in ship construction. Roemer said these items may appear meager, but they provide valuable information about the vessel's architecture and technology and, in some cases, its specific identity.

But Roemer was quick to add that the purpose of the current work is not to recover artifacts, but to locate and protect the existing wreck sites.

"If we tried to recover a lot of artifacts, it would be necessary to make special arrangements to preserve them," Roemer said. "As soon as metallic objects that have been submerged for decades are exposed to the air they quickly begin to deteriorate. The same goes for wooden objects unless we take special measures to stabilize them."

Frozen earth stops pollution

Article and Photo
By Marshall Hudson
Baltimore District

Baltimore District is preparing to pump lots of chilled salt water under and around Disposal Pit One at Fort Detrick, Md., in the ongoing environmental cleanup there.

The pit in the post's Area B-11 is one of four that will be excavated to prevent its contents from leaching into the ground.

"The idea is to get the ground so cold, it will create a barrier of frozen earth," said Clint Kneten, construction representative. "By completely freezing the dirt around and under the pit, we're making sure that we capture and contain everything that was buried. Even if drums or other containers break open during removal, no contaminants will leak into the ground water."

The \$18 million pipe system will go as deep as 35 feet to encircle the pit. To maintain the cooling system, about 35,000 gallons of water will be needed and piped in every day from more than a mile away.

"This isn't new technology, but we're applying it in an innovative way," said Brent Graybill, environmental protection specialist. "It's just one of a number of extraordinary environmental precautions."

Records, test trenches, and soil gas surveys all indicate that the four pits contain laboratory chemicals and materials.

"Since incompatible chemicals were buried together, we must be prepared for any type of reaction during excavation," said Tom Meyer, project manager. "Safety, both for the nearby residents, and for the workers, is the highest priority at the site."



Giant drills pump freezing salt water into the soil at Fort Detrick, Md.

Precautions for workers include mandatory use of full-coverage garments. The suits are decontaminated every time workers leave the work area. Other precautions include remote video monitoring, and the glass window on the backhoe has been replaced with a Plexiglas blast shield.

Some residents live about 100 yards away, and a major housing complex is less than two miles away, so a temporary containment structure is being used over the pits as a safety precaution. The containment structure controls air quality with a carbon filtration system. The system filters the air using giant fans and air intakes, making sure that no particles are allowed

to escape. There is also a foaming system to extinguish any fires or knock down particulates that rise into the air.

All material removed from the pits will be identified and sorted inside the structure before removal to an incinerator or appropriate landfill.

The removal of contaminants from Pit 1 should be completed by next April. The other three pits in Area B-11 are expected to be finished in two years.

The cleanup is a partnership that includes the installation, the Corps, the Army Environmental Center, the Environmental Protection Agency, and the Maryland Department of the Environment.