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Corps boat cleans up bridge debris

By Maria Lee
San Francisco District

When a 902-foot-long container ship ran into the San Francisco-Oakland Bay Bridge, one of the busiest bridges in the U.S., San Francisco District's debris boat was one of the first on the scene to help.

The bridge connects San Francisco with Oakland, and carries about 280,000 vehicles per day. The ship collided with a pier of the central portion of the bridge between Treasure Island and San Francisco. The bridge remained structurally sound, but its fendering system was shattered. As a result, large wooden chunks of debris floated into the path of commercial and recreational ships in the busy bay.

Though reports focused on the gash in the large ship that ruptured its fuel tanks and spilled about 58,000 gallons of bunker fuel into the bay, the Corps diligently went about its job of humbly cleaning up the waterway. Behind the scenes, the crews took out survey boats and the district's debris tug to remove oily large pieces of wood that posed a significant hazard to navigation.

They also gathered up smaller pieces of debris so they wouldn't clog up the skimmers that were trying to contain the oil spill. Without the help of the Corps debris teams, the oil skimmers would not have been able to effectively accomplish their job.

At the end of the first day, the tired crews were



File Photo

A fender on the San Francisco-Oakland Bay Bridge sustained a 70-foot gash (above right) when the container ship *Cosco Busan* (below right) crashed into it. (Above) The *Grizzly*, San Francisco District's debris collection boat, responded to pick up debris.

covered from head to toe with bunker fuel when they returned. They continued on for several days and into Veteran's Day weekend, removing more than 20 tons of oily debris.

News reports noted this was a historic event, the first time a ship had ever hit the Bay Bridge since work began on the bridge almost 74 years ago.

Debris collection of hazards to navigation in the San Francisco Bay and its tributary waters is a key mission of San Francisco District. On average, crews remove 90 tons per month of drift material and clear

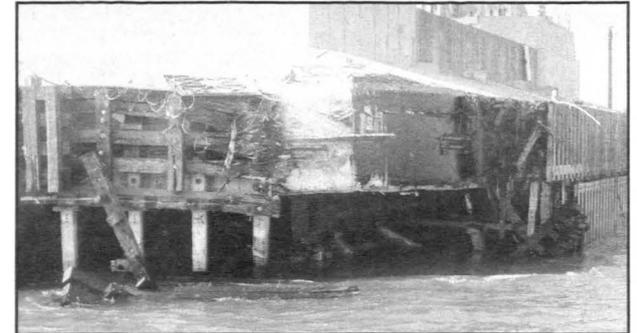


Photo by Greg Altman

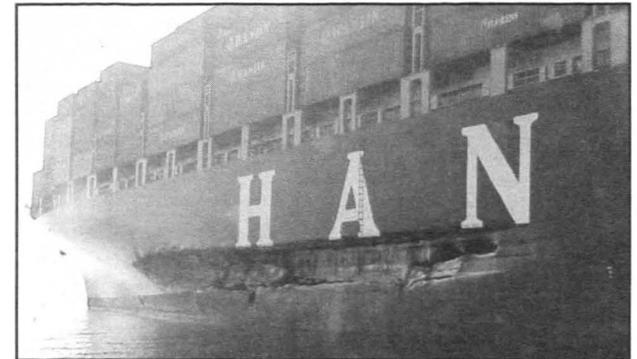


Photo by Chuck Hadley

all areas, fairways, channels, and shipping lanes used for vessel navigation. The floating hazards come from rotting piers, sunken vessels, and storm debris.

Resource management gets HPO study

By Bernard Tate
Headquarters

Resource management is the latest function in the U.S. Army Corps of Engineers to be studied to become a high performing organization (HPO).

"We have a commitment to the Office of Management and Budget (OMB) and the Department of the Army to study 7,500 positions. Not to compete...to study," said Ray Navidi, the Strategic Sourcing Program Manager. "So this is part of our overall Strategic Sourcing Program, and part of our commitment to look at the functions of 7,500 positions."

"We identified the resource management function as a good candidate to be studied to develop a HPO," Navidi continued. "That was briefed to the Assistant Secretary of the Army (Civil Works) and the Corps' leadership, and the proposal went to OMB. That was accepted, so in late October Maj. Gen. Ronald Johnson, the Deputy Commanding General, sent an e-mail to the field asking for the nomination for one individual from each region and center to serve on the study team."

The nominations were due at the end of November, and in January the team will have its first organization meeting to launch the study. Navidi estimates that the study will take about 18 months, and in that time the team will examine the Corps' entire resource management operation – "What must get done," said Navidi. "What metrics are in place now and what should they be in the future? How can we improve business processes?"

Then the team will develop a performance work statement from the work breakdown structure, which is basically a description of all the activities

that must take place in resource management. Subsequently, the team will examine the business processes and look for areas that can be made more efficient and effective.

"Effectiveness is very important," said Navidi. "This is not just about efficiency or cost savings."

The final step is for the Corps' leadership to look at the study results and, once approved, begin implementation.

"And that all depends on what kinds of recommendations that the team comes up with, and what changes or refinements to the RM processes that they find," Navidi said. "People just assume that reorganization or restructuring is a natural second step, but that's not necessarily so. It all depends on what the study tells us."

Navidi said there are several important things to remember about a high performing organization study.

"This is *not* an A-76 competition," Navidi said. "We're *not* talking about target reductions, or target savings, or anything of that sort. We're talking about making the RM operation more efficient, effective, and streamlined to support the Corps' mission."

The study processes for an HPO and an A-76 competition are very similar, but "where the similarities end between A-76 and HPO process is that we are *not* competing against the private sector," Navidi continued. "In an HPO, we go through all the processes laid out in A-76, *except* for the competition."

"Another important factor to mention is that the study team is pretty much independent," Navidi added. "Once the team gets broad guidelines or principles from the Director of Resource Management

and the Chief of Engineers, they are free to do their work and come up with recommendations and improvements. It's an open, transparent process."

According to Navidi, the guiding principles laid out by the Chief of Engineers for the Resource Management High Performing Organization Study are "we're not talking about a national organization, and we're not talking about a significant mass movement of employees. This is not about reorganization; it's about changing or refining our resource management business processes."

This is not the first time that the Corps of Engineers has carried out a study of this type, and we have a reputation for doing it well.

"We have had a lot of success with similar initiatives, and folks from other Army agencies are coming to look at the way we conduct these studies," Navidi said. "We have established solid credibility with the Department of the Army, Office of the Secretary of Defense, OMB, and Congress in how we conduct these studies, and I think that speaks volumes for the way the Corps does business."

The Army Material Command and the Installation Management Command have both taken lessons-learned from the Corps' methods of conducting HPO studies and A-76 competitions.

USACE also has the Navigation Locks and Dams System High performing Organization Study currently underway, and a HPO study was completed for logistics management. The Corps has also conducted A-76 competitions for Information Management/Information Technology Corps-wide, the Finance Center in Millington, Tenn., and the Directorate of Public Works at ERDC in Vicksburg, Miss., and Hanover, N.H.

Insights

Thanksgiving should be celebrated all year

Col. Sherrill Munn
Chaplain, U.S. Army Corps of Engineers

A short time ago, we celebrated Thanksgiving, and we now look forward to Christmas, Hanukkah, and other December holidays. In keeping with the spirit of this season, I want to reflect upon the blessings we have received.

However, a thankful heart should not be reserved for one day or even one season of the year. In fact, adopting an attitude of thanksgiving brings a profound change in our life. As Lutheran pastor Dietrich Bonhoeffer, who was martyred for resisting Hitler and the Nazis, said, "In ordinary life we hardly realize that we receive a great deal more than we give, and that it is only with gratitude that life becomes rich."

I know that many of us have faced significant loss and difficulties in the past year. Sometimes it is difficult to see the good that is in our life. Perhaps the colonists of New Plymouth who celebrated the first Thanksgiving can help us see that there is light even in the midst of darkness.

Understanding some of the history of those first Pilgrims will help us appreciate the significance of that first Thanksgiving and the spirit of thankfulness they shared.

Difficulties. The *Mayflower* sailed from Plymouth, England, on Sept. 16, 1620, with 102 passengers. After an arduous passage that saw a number of passengers die, the ship dropped anchor off Cape Cod on Nov. 11.

The Pilgrims lived on the *Mayflower* through the winter. During the winter, the men would disembark to cut trees and build dwellings and a protective palisade. The first dwelling built was a makeshift hospital to separate the sick and dying from the healthy. During the voyage and the first winter, the pilgrims lost half their number.

The Pilgrims finally disembarked on March 21, 1621, into dwellings that became the town of New Plymouth.

Help. After the colonists disembarked, their first concern was clearing and cultivating land for food. They soon made contact with the Wampanoag tribe, which became a beneficial relationship. Squanto, one of the Wampanoag, showed the colonists how to fertilize their corn crop with fish to get a better yield.

At the end of the first summer, only about 50 colonists had survived, but they had a good harvest. So the first "Thanksgiving" feast was actually a harvest feast, probably patterned after the traditional harvest feast celebrated in England on Sept. 29.

Celebration. The colonists' celebration occurred sometime between the end of September and mid-November, and lasted three days. Eyewitness reports tell us that Gov. Bradford sent out four men to shoot birds to supply the feast, and they came back with enough fowl of various sorts (but no turkey) to feed the colonists for a week.

During the feast, the Wampanoag king, Massasoit, came to the settlement with about 90 men. He sent some tribesmen hunting, who returned with five deer

to add to the feast.

The Wampanoag and colonists celebrated with games, practicing with their firearms, and feasting on such things as cod, eel, clams, lobster, goose, duck, crane, swan, partridge, venison, seal, wheat flour, Indian corn, peas, beans, lettuce, radishes, carrots, pumpkin (but no pumpkin pie), plums, grapes, walnuts, chestnuts, acorns, liverwort, leeks, currants, and parsnips.

This celebration was also a one-time event. The tradition of our modern Thanksgiving started when some states began celebrating a Thanksgiving holiday in the 1800s. Abraham Lincoln finally gave it federal recognition in 1863, proclaiming the last Thursday in November as Thanksgiving Day. In 1939, President Franklin D. Roosevelt set the date of Thanksgiving as the fourth Thursday in November, and Congress ratified the decision in 1941.

Giving thanks. I wonder how we would see things today, if we, on any enterprise we might undertake, lost half of our people. And yet that is what happened to these pilgrims. The women were particularly hard hit. Traditionally, in the 17th century, women prepared the meals with the help of the children who also helped serve. But we know that only four adult women survived to prepare the meals at the first Thanksgiving, with the help of the older girls.

The attitude of these first pilgrims was not how desperate was their plight, but thanksgiving to God for how well their plantation had begun and for bringing them through so many hardships to this harvest of bounty. These were very religious people: Separatists from the Church of England. In their celebration, they would have most certainly offered prayers of Thanksgiving to God and probably read Psalms of Thanksgiving such as Psalm 100:

Be joyful in the lord, all you lands;

Serve the Lord with gladness and come before His presence with a song.

Know this: The Lord Himself is God; He Himself has made us, and we are His.

We are His people and the sheep of His pasture.

Enter into His gates with thanksgiving; go into His court with praise; give thanks to Him and call upon His Name.

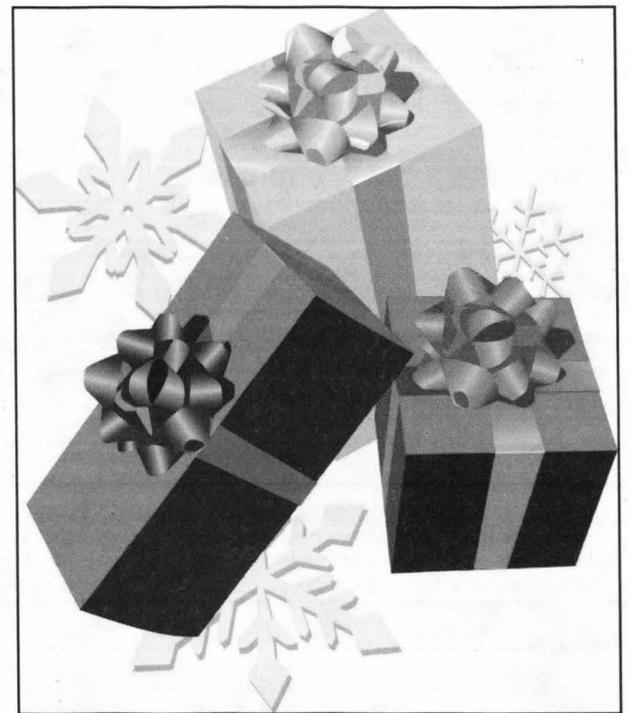
For the Lord is good; His mercy is everlasting; and His faithfulness endures from age to age.

Whether the Pilgrims actually read this psalm or not, we do not know. However, it certainly reflects their attitude. Even though that first year they buried as many as celebrated at the harvest feast, they thanked God for blessing them and looked to the future with great hope.

"If..." While I do not know your circumstances, I do encourage you to look for the blessings in life that we sometimes overlook because of the concerns that beset us. I received this message in an e-mail from a friend. It reminds us how blessed we can be and not realize it.

"If you woke up this morning with more health than illness, you are blessed more than the one million who won't survive this week.

"If you have never experienced the danger of con-



stant violence, the loneliness of imprisonment, the agony of torture, or the pangs of starvation, you are ahead of 20 million people around the world.

"If you attend a church meeting without fear of harassment, arrest, torture, or death, you are more blessed than nearly three billion people around the world.

"If you have food in your refrigerator, clothes on your back, a roof over your head, and a bed to sleep in, you are richer than the majority of people in the world.

"If you have money in the bank, in your wallet, and spare change in a dish somewhere, you are among the top 10 percent of the world's wealthy.

"If you can hold up your head with a smile on your face and are truly thankful, you are blessed because the majority can, but most do not.

"If you can read this message, you are more blessed than the two billion in the world who cannot read anything at all.

"You are so blessed in ways you may never know."

In 2006, my wife and I spent our last Thanksgiving in this life with my Dad. He died two weeks later. The loss was painful, but in the midst of the sorrow, I thought how blessed I have been to have such a father. I knew his love and my mother's, who passed on before him, for more than 50 years.

All year long. In the midst of every difficulty, every pain, every sorrow, we can find blessings, if we look for them. In the darkest night, the light of hope shines, if we have the eyes to see it. What are you thankful for this year? I encourage you to look for the blessings in your life and adopt an attitude of thanksgiving throughout the year. It will change your life.

In the words of Dr. Noel Smith, scholar, teacher, and editor of a religious publication, "Gratitude is not a spiritual or moral dessert which we may take or push away according to the whims of the moment, and in either case without material consequences. Gratitude is the very bread and meat of spiritual and moral health, individually and collectively."

I pray that you will see the blessings that are yours during this season and throughout the year, and that you will always have a grateful heart. Life will be some much better, if you do. Your burdens will be lighter and your spirit uplifted.

(The opinions expressed in this article are those of the writer 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.)



Technology makes lock transits safer

By Bernard Tate
Headquarters

It has never been easy to pilot a boat on the Mississippi River. In 1883, Samuel Clemens (Mark Twain) published *Life on the Mississippi*, and devoted several chapters to his career as a steamboat pilot in the years just before the Civil War.

Clemens describes his mentor, Horace Bixby, piloting a steamboat on a tense, dangerous night-passage past an island when Clemens was still a cub pilot:

'He's a lightning pilot'

"Fully to realize the precision required in laying the steamer in her marks in that murky waste of water, one should know that not only must she pick her way through snags and blind reefs, and then shave the island so close as to brush the foliage with her stern, but at one place she must pass almost within arm's reach of a sunken wreck that would destroy a quarter of a million dollars of steamboat and cargo and 150 lives into the bargain. The last remark I heard that night was a compliment to Mr. Bixby, uttered by one of our guests, 'By the Shadow of Death, but he's a lightning pilot!'"

Years later, when Clemens' traveled the river in 1882 to write *Life on the Mississippi*, he found it much changed. Thanks to the U.S. Army Corps of Engineers, the snags and wrecks had been removed, the channel dredged and marked by buoys and lights, and the shifting riverbanks stabilized by mats and riprap.

The railroads had all but ended the steamboat traffic, but Clemens saw arrays of barges pushed along by sternwheelers, and noted that the towboat *Jos. B. Williams* traveled from Pittsburgh to New Orleans in 14 or 15 days with a tow of 32 barges carrying 22,800 tons of coal, a record at that time. Clemens said that the railroads of his day would have taken all summer to transport the same amount of coal.

So Clemens would still recognize the Mississippi River of today, and he would recognize something else, too...it is still dangerous to pilot a tow on the Mississippi, but the Corps is always working to make it safer.

"I took a trip down the Ohio River on a navigation industry tow in 1988, and they let me steer their towboat for awhile at night," said Mike Kidby, Senior Program Manager for Inland Waterways. "When you approach a bend in the river with one of those big 15-barge tows out in front of you, you have to start your turn three or four miles up the river so that you can be in the right position as you go around that curve. You pray all the way around the bend."

Threading a needle

The problem becomes even more critical when a pilot steers his tow into one of the 240 navigation locks that the Corps operates and maintains. It has been compared to threading a needle 600 to 1,200 feet long and 110 wide with a thread (barge tow) 105 feet wide. Accidents are common — since 2002, there have been 1,010 barge allisions at Corps locks that closed the lock for at least one hour. (An "allision" is a Coast Guard technical term for a moving vessel striking any fixed or unmoving part of a lock or project.)

There is no time pattern to the accidents; they range from 168 allisions in 2002 to 213 in 2004.

"Maj. Gen. Don Riley, the Director of Civil Works, felt that we needed to do something about that," said Kidby. "He directed Operations Division to look into it, and develop whatever we felt could be done."

The result is the Inland Navigation Safety Initiative, now in effect at all districts Corps-wide that have navigation locks and dams.

"Early in 2006, the navigation industry told the



This device mounted on a navigation lock's bull nose shows the distance in feet from the barge at the front of the tow to the bull nose. (USACE file photo)

Engineering Research & Development Center (ERDC) that one of their prime concerns is the out-draft conditions as they approach the lock chamber. When the dam gates are open to pass all the water reaching the project, and water is being drawn toward the dam, that tends to pull the bow of their barge tows toward the dam and away from the lock chamber. They could hit the lock as they attempt to counter that current, or they might wind up on the dam."

Current velocity

Kidby and other Headquarters, major subordinate command, district, and ERDC personnel held a workshop with navigation industry representatives in March 2006 to discuss their safety concerns. During that workshop ERDC demonstrated a device called a Real-Time Current Velocity (RTC) instrument.

"The RTCV is an instrument that you put out on the approach wall between the lock chamber and the dam," said Kidby. "The end of that approach wall is called the bull nose. You can put the RTCV out on the bull nose, and it records the currents flowing past that point."

The real-time information can be transmitted to the towboat's wheelhouse wirelessly, and displayed as arrows on the Inland Electronic Navigation Chart, the visual display on the towboat's radar screen. The information about the currents can be supplemented with wind speed and direction, which is also a factor as the tow gets near the lock chamber.

"With that kind of information, when the towboat pilots are still miles upstream or downstream, they can judge what they need to do to be in a better position when they come around that last bend toward the lock," said Kidby.

The RTCV system was demonstrated at the Tom Bevill Lock and Dam on the Tenn-Tom Waterway in Mobile District in September 2006. Since then, the district has purchased the instrument and is using it at that location on the waterway.

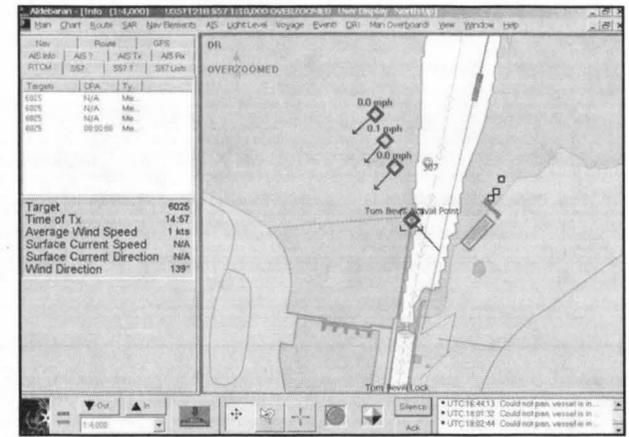
"It has also been demonstrated at the Ensworth Lock and Dam on the Ohio River at the end of last year," said Kidby. "The navigation industry saw both of those demonstrations, and they were pleased with the information that it can present."

"We won't put this RTCV system at every one of our locks and dams. We don't need to," Kidby added. "But can put them at the critical ones that have been a problem for us and for the navigation industry."

Distance

Kidby said that the Corps' Operations people are investigating other things as well.

"We're looking at an instrument that can be put up on the bull nose pointing toward the tow," he said. "It has a digital read-out giving the distance from the bull nose to the nearest barge coming toward it.



The Real-Time Current Velocity instrument displays the speed and direction of the river current on the towboat's radar screen. (USACE file photo)

The towboat pilot focuses on the lock approach, and is very concerned about where the bull nose is. The pilot can look out of the wheelhouse window and see that instrument indicating the distance from the tow to the bull nose.

Signs

"We're also looking at our signage," said Kidby. "We have a sign manual that details exactly what kinds of signs are needed at each of our projects. Some of them are very large, and they have to be very reflective so they can be read by the towboaters and recreational boaters."

"But we're concerned about the glare issue, and we're talking to the navigation industry to see if there are critical projects where glare is a concern," Kidby said. "They bring their tows down in both daytime and at night, and when they point their spotlight at a sign and it reflects a lot of light back at them, it destroys their night vision in the wheelhouse."

Information service

The Corps is also working with the Coast Guard and with the National Oceanographic & Atmospheric Administration (NOAA) to develop a Coastal and River Information Service. "The Coast Guard is responsible for an Automatic Identification System (AIS)," said Kidby. "We can use the Coast Guard AIS architecture as a base for our RTCV. NOAA can use the AIS architecture for its tide and current information as well, and the towing industry can use it to transmit vessel and cargo information to the Corps and Coast Guard. That's something that we're working on, but that is in the near future, we hope in the next couple of years."

Bumpers

In addition, the Marine Design Center in Philadelphia, ERDC, and district operations representatives are working to create or adapt an energy-absorbing structure, like a bumper, for the bull nose to protect both the lock and the barges in case of an impact.

"Those are the kinds of things that we're doing in the Inland Navigation Safety Initiative to improve the safety, reliability, and efficiency of our locks and dams," said Kidby. "That's the bottom line, and it will benefit us, the Coast Guard, the navigation industry, NOAA, and any others involved in the partnership."

The effects will be felt in the field almost immediately.

"I'm preparing a memo to district commanders that provides guidance to work with the navigation industry to begin implementing the RTCV this fiscal year," Kidby said. "In fiscal year 2009, we plan to implement the energy-absorbing material demonstration project."



A scenic view of the two-lane, 53-mile-long Palau Compact road. (Photo by Paul Mizue)



This is an aerial view of two causeways on the northwest coast of Babeldaob. (Photo courtesy of South Pacific Division)

New road will bolster island economy

By Joseph Bonfiglio
Honolulu District

The citizens of Palau in the South Pacific now have a new highway that gives them unprecedented ease of travel on their rugged island.

"Today marks the success of all those who have worked together to overcome challenges to build a better future for the people of Palau," said Brig. Gen. John Peabody, commander of Pacific Ocean Division. "The Palau Compact Road is a marvel and a testament to the vision of those who dreamed about the road, the designers who spent years putting the plans together, the construction team that built it, and to the people of Palau."

Palau Compact

U.S. involvement with Palau (the westernmost of Micronesia's Caroline Islands) dates back to World War II when American forces liberated the islands. After the war, the UN created the Trust Territory of the Pacific Islands, and the U.S. became the administering authority.

Palau and the U.S. signed a Compact of Free Association in 1994. Palau became a sovereign state under the Compact, and the U.S. continued to be responsible for its defense.

As part of the Compact, the U.S. promised to build a 53-mile-long paved road on Babeldaob, the largest of Palau's more than 300 islands. About two-thirds of Palau's 20,000 people live in the capital of Koror, which has only about four percent of the nation's land.

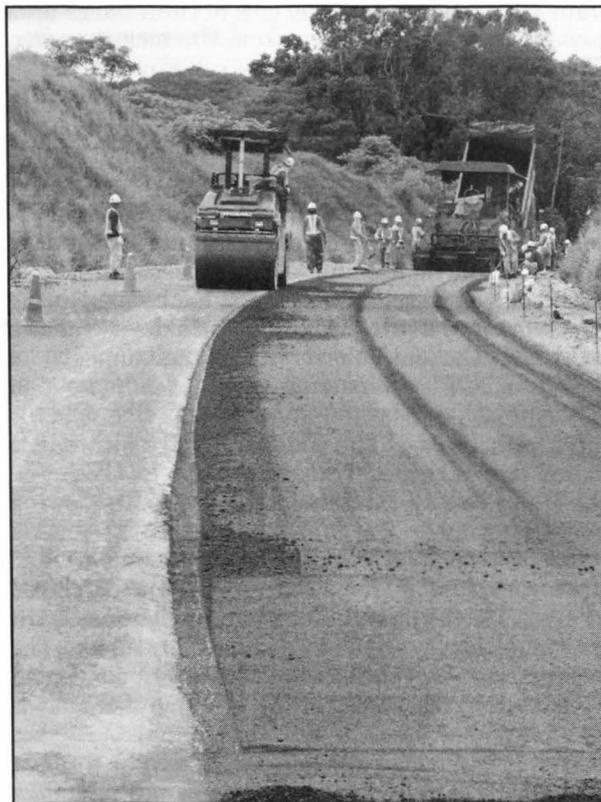
Badly needed

It is hoped that the road, built under the Corps' design and supervision, will change the island nation's future and foster Palau's economic development. Palauans who own land in Babeldaob, for example, will be able to commute from their homes rather than to live in rented apartments to work in Koror.

Likewise, Palauans living in villages on Babeldaob will have access to the hospital, college, and other facilities in Koror. Greater accessibility to Babeldaob will provide the room and the opportunity for Palau and its people to grow.

The road was badly needed, according to Alex Morrison, Honolulu District's resident engineer and administrative contracting officer for the project since its inception.

"Even though it's larger than all the other Palau



Construction workers pave a section of the Palau Compact Road. (Photo courtesy of South Pacific Division)

islands combined, Babeldaob had almost no paved roads," he said. "It was impossible to drive from north to south if there had been any rain at all, and if you could drive, it was an eight-to-10-hour trek. So most of the travel around the island was by boat."

The road meets Department of Transportation standards and includes access to the new capital site at Melekeok. The road is 24 feet wide, with an asphalt-concrete surface and shoulders.

Hiring

The Department of Interior (DoI) "hired" the Corps to manage the road's design and construction. DoI had overall responsibility, while Honolulu District did the planning and design of the road, and managed its construction and completion.

Four Honolulu-based architectural-engineering firms collaborated on the design between 1994 and 1998, and the construction contract was awarded to prime contractor Daewoo Engineering and Construction of Seoul, Korea, March 30, 1999.

Building the road presented a number of challenges, starting with the island itself.

"Palau is not as mountainous as, say, Hawaii, Morrison said. "But it is hilly, with very steep terrain features. It's very heavily vegetated and, because it's tropical, rainfall is common and often heavy. That means there are also a lot of streams and rivers. So it's a challenging place from an engineering point of view."

Construction

Another real concern was the substantial amount of World War II ordnance still on the island.

"There was a lot of fighting here during the war, and since this job started we've picked up more than 5,000 pieces of ordnance," Morrison said.

Once the jungle was cleared and ordnance removed, the alignment was graded and the construction crews began a "cut and fill" operation.

"That's basically where you cut the hills down and fill the valleys up," Morrison said. "We've also had to deal with some 400 stream crossings, so there are a lot of drainage issues to deal with."

Seven major bridges had to be built along the road's route. Two cross ocean inlets, and the others cross streams or rivers.

Given the extent of the construction and the pristine land and coastal environment, the Corps was careful to enforce strict environmental standards.

"In terms of environmental planning and impacts, this road was built to the same standards we would use if we were building it in California or Kansas," Morrison said. "The Environmental Protection Agency, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service were all involved in the design phase, and their involvement continued during the construction phase."

That same care and concern went into every aspect of the project.

"Everyone involved with this takes great pride in it, both because we want to build the best road possible and because we were working against some tremendous odds," Morrison said. "From an engineering and construction standpoint, this is as challenging as a road project could possibly be. The journey that used to take an entire day now takes two hours.

"And that's one reason why I found this project so fascinating," Morrison added. "The people of Palau now have a level of access to their own land that they've never before had. This road will fundamentally change Palau's future, and I appreciate the chance to be part of such an important effort."

Iraq tower is Everest-size challenge

Article by John Connor
 Photos by James Hodges
 Gulf Region South District

Sir Edmund Hillary climbed Mt. Everest because it was there.

Stalwarts with the U.S. Army Corps of Engineers run up and down the stairs of the Basrah Air Control Tower for much the same reason.

The tower stands about 14 stories high, and if you negotiate the stairs up and down 233 times, you have done the equivalent of climbing Mt. Everest. Those who make it receive a plaque proving that they met the Mt. Everest Challenge.

And a few people from the Corps recently rappelled down the face of the tower to raise money for a charitable cause.

The Basrah Air Control Tower is a fully operational facility, controlling flights in and from the Basrah International Airport. It is located near Gulf Region Division's Basrah Area Office.

Lt. Col. Kenneth McDonald, officer in charge of the Basrah Area Office and a deputy commander of Gulf Region South District, said physical training is a major stress reliever in a sometimes hostile environment.

McDonald runs the tower a couple times a week, but other people in the command take different approaches. These include running on treadmills, pounding on the two punching bags available for those pugilistically inclined, lifting weights, and walking.

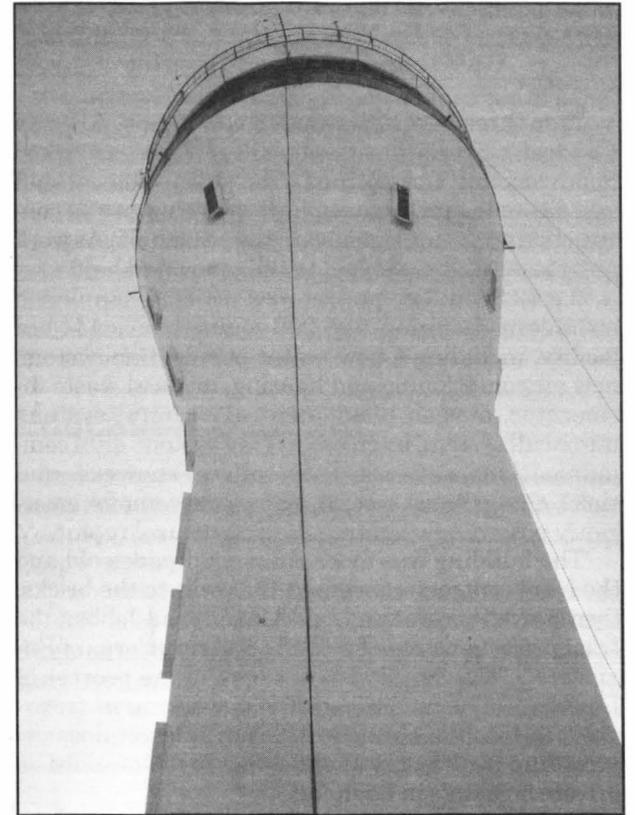
Navy Lt. Cmdr Chad Lorenzana, resident engineer with the Basrah Area Office, prefers running the tower to running on a treadmill. He said the top of the tower has a nice view and is a great place to take pictures, which is a plus if you are an avid photographer like him. He started running the tower last June and runs up and down five times once every two weeks or so.

Hazards include sore backside muscles.

"It's quite exhausting," said Tia Chandler, the Basrah Office's administrative officer. She runs up



(Right) The Basrah Air Control Tower is a control center for flights in and out of Basrah International Airport, and a challenge to runners on the installation. (Above) Tia Chandler rappels down the tower.



and down the tower six times per outing, now every day. People who work in the tower don't mind the runners, she said, reporting that a log book is kept for Mt. Everest Challengers to record their numbers. She also said the Basrah power system occasionally leaves tower runners in the dark, but that chemical glow-sticks are available in that eventuality.

"The competitive streak in me wants to take back the 'exhausting' comment, but I suppose it is," said Chandler, who also commented that running the tower is good for building team spirit.

Maj. Rick Smith, S-3 and liaison officer to MND-SE, is another tower runner. He has been at it for about four months and does 10 pull-ups every time he reaches the top, working on a double challenge. He's now also up to six times a run.

The tower runners all have great stories to tell, but it's hard to beat the one about the British soldier who did his 233 round trips in a *single day*.

Running the tower might seem quite tame compared to rappelling down its face. But James Hodges,

chief construction representative at the Basrah Office, said rappelling is easy. He and the other USACE tower runners were offered the opportunity as part of a fund-raising event put on by the British contingent to support injured UK troops. He also said it provided a good opportunity to relieve a little stress.

Chandler found the rappelling experience "a little scary," but added that she wasn't about to pass on a chance to rappel off a tower, "in Iraq no less." She also works out on the punching bags, having acquired boxing and jujitsu skills in Iraq, and plans to keep up her workouts when she returns home.

(Tia Chandler also contributed to this article.)

Norfolk District singers love to bring joy

Article and Photos
 By Patrick Bloodgood
 Norfolk District

The Corpsaleers, Norfolk District's popular vocal ensemble, was born in 1985 when two district employees sitting on opposite sides of a cubicle began singing to and with each other.

The two employees, Marsha Flood and Patricia Lee-Ingram, were singing aloud when the idea of a larger group was born.

"As the seasons changed and Christmas rolled around, she (Lee) said we could use a group here, a group of carolers," said Flood, the Corpsaleers' director.

That idea generated a call for volunteers who were interested in lending their voices to a district caroling group.

Shortly thereafter, the Corpsaleers debuted with around 15 carolers spreading holiday cheer to their fellow employees.

It wasn't long before this dedicated group of choral aficionados took their harmonious joy on the road to children at the Children's Hospital of The Kings Daughter in Norfolk, Va. and the St. Mary's Home for Disabled Chil-



Norfolk District's Corpsaleers perform for the children at St. Mary's Home for Disabled Children in Virginia Beach, Va.

dren in Virginia Beach, Va.

"It's really a joy! I have people who will come off leave to sing for the children because it is something that they love to do," Flood said.

The highlight for Flood over the past couple of decades was a district change of command ceremony at a local hotel

where the Corpsaleers were the featured performers.

"We had a very full group and our commander really enjoyed our music and wanted us to perform at his change of command. It was just *awesome*," said Flood.

Flood said the Corpsaleers are al-



Marsha Flood leads the Corpsaleers during a district town hall meeting.

ways in need of voices; in fact, anybody can pick up one of their binders that contain lyrical notes and join in at any of their performances.

The Corpsaleers voluntarily give up their lunchtimes and can be heard practicing in any one of the conference rooms scattered through out the Waterfield Building, Norfolk District's headquarters.

"I'm begging for members all the time," Flood said. "If you're humming and you walk near me, then I'm asking you...come join our group."

Hospital renovation nearly complete

Article and Photo
By Norris Jones
Gulf Region Central District

After three years of cramped conditions, Alwaiya Children's Hospital patients will soon see a marked improvement. To keep the facility open, medical staff and patients crowded into half the structure so construction crews could renovate the other half. As work progressed, they switched to the renovated half.

The \$2.86 million project now nearing completion involves modernizing the 6,000-square-meter, 144-bed facility, including a new water purification system, new air conditioning and heating, medical waste incinerator, oxygen plant, central vacuum system, nurse call system, intercom paging system, data communications network, new toilets, showers, and sinks, new exhaust system, a new generator for emergency power, new lighting, and structural repair.

"The building was more than six decades old and the Iraqi contractor stripped the walls to the bricks, then started renovation," said Mohammad Jabbar, the Iraqi project engineer for the U.S. Army Corps of Engineers. "This hospital takes care of the poorest in Baghdad. The medical staff was working in miserable conditions. Alwaiya Children's Hospital is now providing health care at the same high standard as private hospitals in Baghdad.

"It touches your heart every time you walk through



An Iraqi mother seeks care for her newborn at Alwaiya Children's Hospital in Baghdad.

the door and see these youngsters benefitting from this effort," Jabbar added. "It comes down to the basics of humanity and helping save people's lives. The doctors and nurses are now using equipment that was

not available to them three years ago."

Dr. Talib Hassan, the hospital's deputy administrator, said he is pleased with the work. "Our hospital was old and needed new equipment. We still have a few more repairs to do, but we look forward to finishing and putting the entire facility to good use."

The hospital sees 350 patients daily ranging from newborns to age 14. Most are cared for as outpatients, but about 40 must be admitted for further treatment. Most common ailments are gastro-intestinal illnesses due to unclean water, and flu/respiratory problems that increase during the winter.

The medical staff has 41 doctors and 40 nurses.

Col. Robert Vasta with the Corps complimented Dr. Hassan and his staff for the care they provide.

"The doctors and nurses here are real heroes," Vasta said. "They make the difference. They put their lives at risk to take care of Iraq's most vulnerable citizens."

During a trip to the hospital Nov. 7, Vasta's executive secretary, Hunter Logan, brought several boxes of donated items. "Fortunately, we have a number of people in the U.S. who send us donations regularly — toddler clothing, toys, school supplies, blankets," Hunter said. "It was a special moment handing out those items...touching the lives of the youngsters. Our renovation work is helping the medical staff treat those children. It was great to see it all coming together."

The Corps is currently overseeing the renovation of five major hospitals in Baghdad.

HR Corner

Interns, entry level benefits from NSPS

The National Personnel Security System (NSPS) allows a more flexible, fluid compensation system for entry or intern level positions than our current general schedule system. As more organizations move into NSPS, this should allow them to make more competitive offers to potential candidates as we compete with other companies for future talent.

By February, most managers will have the ability to use NSPS flexibilities in hiring locally funded interns and employees for developmental positions, provided they are not bargaining unit positions. Bargaining unit positions and Department of Army intern positions will convert into NSPS at a later date to be determined.

The intern/developmental programs apply to pay band 1 positions in:

- Scientific and Engineer (S&E) Career Group (YD)
- Standard Career Group (YA)
- Medical Career Group (YH)
- Investigative and Protective Services Career Group (YK).

The bulk of the U.S. Army Corps of Engineers' positions will fall under the YD and YA career groups. Examples of YD include:

- 801, General Engineers
- 810, Civil Engineers
- 830, Mechanical Engineers
- 850, Electrical Engineers
- 819, Environmental Engineers
- 401, Biologists

Any S&E occupations that have a positive education requirement will fall under this program.

Some of the more common ones found in YA career groups include:

- 110, Economists
- 201, HR Specialists
- 343, Program Analysts
- 510 or 511, Accountants or Auditors
- 1102, Contract Specialists.

Other occupations such as 025, Park Rangers; 0802, Engineering Technicians; and 0809, Construction Representatives are not included as part of this

program.

Under the old GS system, managers are typically restricted to offering salaries beginning at the first step of the grade level of which the candidate qualified. For example, most students who just graduated out of college with a bachelor's degree and no prior related experience would qualify at the GS-5 or GS-7 levels, depending upon grade point average. Master degree recipients could qualify at the GS-9 level. In many cases, this restricted a manager's ability to offer a competitive salary to candidates since they typically had to offer at the step one level.

Under NSPS, managers will have the flexibility to set entry salaries anywhere between the step one rate of the former GS-grade equivalent plus 30 percent, up to the pay band maximum rate of pay. In deciding a salary offer, managers may consider in addition to education and grade point average, qualifications of the individual, labor market, scarcity of candidates, organizational needs, and other job offers the candidate may have received.

The bottom line is managers will be able to offer salaries that are commensurate with the market and needs of the organization.

Another key feature in NSPS is the use of accelerated compensation for developmental positions (ACDP). Managers may award their fast learners or high performers more quickly than you would typically find under the GS system that are bound by "time in grade restrictions," normally one year. An employee who has acquired the set of predefined job related competencies through training or on the job experience as identified by an individual development plan may be given an ACDP payment as early as six months. Generally, ACDP increases will be no more than 20 percent per year, but may be higher or lower depending on individual circumstances.

One purpose of the accelerated pay is to compensate an employee at a level that matches their expertise and contributions to the organization without waiting on time in grade. It is possible to move an employee faster through the NSPS system versus

the normal two-and-a-half-to-three-year period it takes to move an employee from a GS-5 to a target GS-11 grade you find in the general schedule system.

All intern, entry level, and developmental positions are filled at pay band one. As the employees complete their training and acquire the needed job skills, managers may promote them to the pay band 2. Pay band 2 includes journey level workers under NSPS. For promotion to pay band 2, an employee's base salary can be increased from 6 to 20 percent to achieve a target salary level in the band.

Some factors a manager may use to decide the salary that an employee receives upon promotion could include achieved competencies, salary of employees in the unit performing similar work, and the employee's expected contributions to the organization.

Like other employees under NSPS, interns/developmental employees will be evaluated for performance. They will follow the standard NSPS appraisal period of Oct. 1 through Sept. 30 and receive a rating of record for each cycle. However, managers have the flexibility to do six month reviews that may result in ACDP increases as a result.

Performance objectives for interns/developmental employees will consist of master intern training plans, individual developmental plans and any on the job experiences planned for the rating year. In addition to salary increases under ACDP, interns will be eligible to receive performance bonuses as part of their performance evaluations.

For more information on how you can make the NSPS intern/developmental program work for you, please consult your local Human Resources Office.

Additional information may be found on the Army NSPS Web site at <http://www.cpms.osd.mil/nsps> or Appendix 1 at http://cpol.army.mil/library/general/nsps/docr/Army_NSPS_Interim_Instruction_31AUG2007.pdf or <http://www.cpms.osd.mil/NSPS/docs/ACDPFactSheet063006b.pdf>

Around the Corps



Command Sgt. Maj. (ret.) William Leach was the Corps' first Command Sergeant Major.

CSM (ret.) William Leach

Command Sgt. Maj. (retired) William Leach, the Corps' first Command Sergeant Major 1980-84, passed away peacefully on Nov. 2.

Leach was a native of North Carolina and joined the Army in 1954. He served for 30 years, progressing from private (the lowest enlisted rank) to command sergeant major (the highest enlisted rank).

Before his appointment as the Corps' Command Sergeant Major in 1980, Leach served as the command sergeant major of the 2d Engineer Battalion, 2d Infantry Division; U.S. Army Mobility Research and Development Command; and 1st Battalion, U.S. Army Transportation School Brigade.

Leach's awards include the Air Medal for heroism, the Vietnamese Gallantry Cross with Bronze Star, a Purple Heart for wounds received in Vietnam, and the Bronze Star Medal with V Device and first Oak Leaf Cluster.

His military career ended in 1984. He began a second career with Washington Metropolitan Area Transit Authority where he worked as an Asset Management Coordinator. He retired in July 2002, after 20 years of service.

Leach, 70, had been a resident of York County, Va., for the past 18 months. A funeral service was held Nov. 10 in Rowland, NC, and he was interred in the United Methodist Church Cemetery with full military honors.

Public administration award

Joshua Fairley, an electrical engineer and program manager for the Near-surface Phenomenology Program at ERDC has received DoD's David O. Cooke Excellence in Public Administration award for his work in countermine phenomenology, joint antiterrorism/force protection, and antiterrorist barrier programs.

Fairley developed an automated target recognition numerical algorithm to evaluate the accuracy of electro-optical and infrared detection systems for mines and improvised explosive devices, improving accuracy of these systems by 75 percent and reducing false alarms.

Fairley also developed software to guide use of the Joint Antiterrorism/Force Protection System that determines required planning, risk reduction measures, resources, and exercises needed to protect installations from terrorist attack.

He created a testing apparatus for an antiterrorist barrier system with unusual dimensions and high load requirements, and later validated it with full-scale crash tests. The barrier system is now in use by both military and civilian communities.

Fallujah

About 450 Iraqis are working to build Fallujah's first-ever sewer system by next summer. The \$85 million project includes a collection system, trunk mains, pump stations, and a wastewater treatment plant processing 40,000 cubic meters daily (10.5 million gallons).

Peter Collins is the Corps' project manager. "The long-term benefit is huge. At the moment, Fallujah's raw sewage is flowing into the Euphrates River, polluting it, impacting communities downstream who depend on it as a drinking source."

Collins says the new treatment plant will serve Fallujah's needs until 2025, even if the community has a 50 percent growth in population.

"People in Fallujah may not fully appreciate the impact of this project because they've never lived in a sewage-free city," Collins said. "Next year there will be no wastewater flowing in the streets and their children will be able to play safely outside. It represents a monumental step forward, and that's what motivates us as we work to achieve that goal."

National talent winner

A Corps employee has won a national talent search sponsored by a prepaid cell phone company. Bruce Hill Jr., the Albuquerque District Public Affairs Officer, entered the nationwide online casting call for Net 10 prepaid cell phones by singing his version of the commercial jingle. He won based on a combination of nationwide public online votes and scores from a panel of judges.

His prize was a \$2,000 check and a chance to be featured in commercials and other promotions for Net 10.

Contestants entered the contest by submitting a photo, a brief biography, and their recording of the Net 10 commercial jingle. The entries were judged, and once down to the final three, the contestants were required to submit a 30 second video.

"I'm particularly happy to win because the video I produced and entered carried a military theme," said Hill, who is also an Air Force Reservist. "I'm proud to serve my country alongside the troops and DoD civilians who make sacrifices in the name of freedom."

Small business award

Galveston District has been recognized for awarding government contracts to service-disabled veteran-owned small businesses. The district awarded more than \$9 million to service-disabled veteran-owned firms in FY07. This was 5.4 percent of the district's contract awards, which exceeded the 3 percent goal set for all federal agencies.

The award was presented Nov. 6 at the Corps' Small Business Conference in St. Louis. Col. David Weston, the Galveston District commander, accepted the award.

"This award shows our commitment to our nation's wounded warriors," Weston said. "Disabled veterans have proven their worth many times on the battlefield, and now bring that same drive and commitment to the business arena. As a nation still at war, it is only right that we give back to those who have given so much for our country."

Iraq bridge project

The Corps has completed a bridge project in Dhi Qar Province in southern Iraq. The Al Dhiyabat Ve-

hicular Bridge project, crossing a canal near Qala, cost \$420,000, according to Navy commander Mike Lang.

Begun last May, the project allows freedom of movement for community members who live on both sides of the canal, and facilitates transportation of agricultural products.

"They're a farming community and the bridge is for access to fields and crops on other side of canal," said Lang, officer in charge of the Adder Area Office. "We're about to start renovation on a school in this same community. It's in the far north part of Dhi Qar, almost into Wassit."

Education onboard

In a unique learning experience, 21 high school students boarded a Corps boat and venturing in the New York Harbor to learn about local projects and the Corps' mission.

The students were from the Arts and Technology High School at the Martin Luther King Educational Campus in Manhattan, and the learning platform was the New York District survey boat *Hocking*.

Rick Alvarez, chief of Construction Division, headed the day-long event that included a harbor inspection and a tour of the Operations Facility at Caven Point, N.J.

"This experience offers unique opportunities beyond the classroom for students to learn what the Corps of Engineers does daily around the harbor," said Alvarez. "It serves as a learning platform, and solidifies our partnering relationship with Martin Luther King High School."

Once underway, Alvarez pointed out key features around the harbor. Highlights included a close-up look at a dredge platform, and a photo opportunity alongside the Statue of Liberty.

Robert Pivrotto, chief of Caven Point Marine Terminal, was one of three mentors who took the students on a tour of the marine facility. Francis Postiglione, chief of Survey Branch, showed students the hydrographic survey process, and Rena Weichenberg explained environmental mitigation.

Primary Healthcare Centers

The Corps has turned over three new Primary Healthcare Centers (PHC) to the Basrah Health Directorate. The PHC projects managed by Gulf Region South district will provide essential medical care to people in undeveloped areas in Basrah Province.

Two PHCs are of the Type A design, and the third is a Type B.

"The A-level clinics treat routine medical problems that all communities face," said Thomas Eidson, Chief of Engineering and Construction. "The B-level clinics provide an even greater level of care by having more sophisticated equipment and the ability to treat diseases that are less common."

The three two-story structures are equipped with modern medical and office equipment, furnishings, and consumables. They provide medical/dental examination and treatment with space dedicated for X-ray, vaccinations, laboratory, pharmacy, and public education.

All three PHCs have a modern fire alarm system, photo light system, telecommunications room, intercom system and water treatment system. Each PHC costs about \$600,000, and will serve between 10,000 to 12,000 patients each year.

Iraq-wide, the USACE effort to build 142 PHCs is 95 percent complete, with 69 turned over to the Ministry of Health, and 33 open to the public. An additional 15 are complete and scheduled for turnover. There are 48 still under construction, three are in work stoppage for security reasons, two are reprogrammed, four are deprogrammed, and one was bombed.

249th Soldiers deploy during Calif. fires

By Staff Sgt. Scott Yeager
249th Engineer Battalion (Prime Power)

On Oct. 25, 12 Soldiers from the 2nd Detachment of Bravo Company of the 249th Engineer Battalion (Prime Power) deployed to provide emergency electric power as part of a national response to the recent wildfires of Southern California. Bravo Company is stationed at Fort Bragg, N.C.

Known to many as "The Black Lions," the mission of the 249th is to provide prime electrical power and electrical systems expertise worldwide in support of military contingency operations and the National Response Plan.

Experts in providing electrical support to during hurricanes, floods, and military contingencies like Operations Iraqi Freedom and Enduring Freedom, this is the first time in recent years that the battal-

ion has responded to wildfires.

Although the Soldiers of Bravo Company provided prime power support and expertise to many in California, it was the restoration of power to the Mesa Grande Indian Reservation weeks ahead of schedule that became the good news story of the deployment. Using generators supplied by the Federal Emergency Management Agency, the Soldiers restored power within hours to these remote groups of homes.

While most of the platoon has returned to Fort Bragg, four Soldiers remain to conduct generator de-installation missions and to conduct prime power cross training with their Navy counterparts at Port Hueneme, Calif.

Any Soldier in the grade of E-4 or E-5 interested in becoming a "Black Lion" should contact Lt. Col. Paul Olsen or Command Sgt. Maj. Andrew McKenna at 703-805-2656, or 249EOC@en249.usace.army.mil.



Firefighters battle the Irvine blaze. (U.S. Forest Service Photo)

Natural Resources team gets new partner

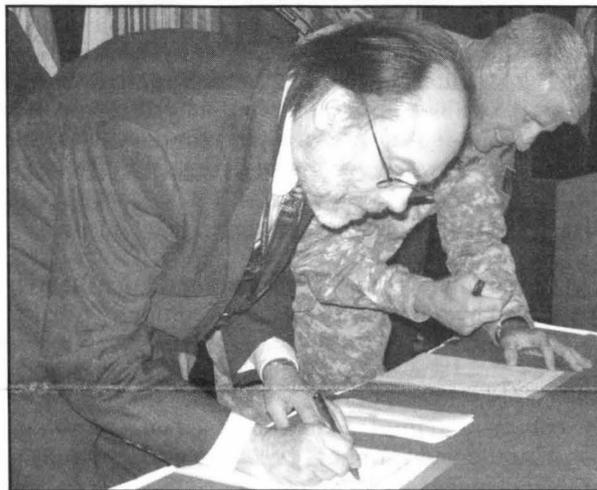
By Cori Brown
Baltimore District

As any good manager will tell you, it helps to have the right partners to get the job done. The U.S. Army Corps of Engineers' Natural Resources Management Community of Practice just added a new ally that will significantly enhance their partnership capabilities. This ally is called the Corps of Engineers Natural Resources Education Foundation (CNREF).

Lt. Gen. Robert Van Antwerp, Chief of Engineers, and Peter Lewis, President of the Corps of Engineers Natural Resources Education Foundation (CNREF) Board of Directors, signed a Memorandum of Understanding marking the beginning of this landmark partnership during the Environmental and Natural Resources Conference in San Antonio on Oct. 30.

CNREF breaks new ground as the only national non-profit organization dedicated to stewardship of environmental, cultural, educational, and outdoor recreation resources associated with the Corps' Natural Resources Management mission. The foundation will bring potential partners together with the Corps to support approved but unfunded natural resources projects. The foundation's goals include:

- Providing additional financial and volunteer support for Corps recreation and natural resources projects.
- Assisting local and regional Corps of Engineers support groups in raising funds for enhancement projects.



Lt. Gen. Robert Van Antwerp, Chief of Engineers, and Peter Lewis, President, Corps of Engineers Natural Resources Education Foundation Board of Directors, sign the Memorandum of Understanding. (Photo by Rusty Morton, Southwestern Division)

- Facilitating partnerships between the public and private sectors and the Corps of Engineers.
- Educating decision-makers and the public about the importance of the Corps' stewardship mission in conserving natural and cultural resources and providing public recreation opportunities.

Once the foundation receives information from

Corps projects, it will determine whether there are activities that meet its supporting criteria of emphasizing long-term community engagement with the Corps, volunteerism, education and interpretive services, and environmental stewardship. Activities the foundation decides to support must have the necessary environmental clearances, planning documentation, and partners already engaged or identified.

CNREF will also support the Corps through individual and corporate memberships open to everyone, including current Corps employees and Corps alumni. Through CNREF, Corps officials envision benefits to project sites that include improvements to hiking trails, development of interpretive brochures, campground rehabilitations, development of teacher education materials, habitat restoration, and protection of cultural sites.

The foundation will also promote the Corps' recreation values of providing high quality, family oriented recreational opportunities close to home, healthy lifestyle, and conservation and sustainment of natural resources for future generations.

"The Corps is proud to enter into this innovative partnership with CNREF," said Mary Coulombe, the Corps' Chief of Natural Resources Management. "This foundation will allow the Corps to work on many environmental and recreation projects and improve visitor experiences and environmental conditions."

For more information about CNREF, visit their Web site at www.Corpsfoundation.org

Cemetery irrigation system improved

Article by JoAnne Castagna
New York District
Photo by Clifton Welch
S&E Services Inc.

Veteran's Day is celebrated every November to honor the uniformed personnel who have served America. It's also a time to honor veterans who made the ultimate sacrifice in combat.

New York District is helping honor deceased veterans by improving the conditions at the Calverton Veterans National Cemetery in Long Island, N.Y. The project will enhance the landscape of the 1,045 acre site, which has deteriorated during the years due to an improper irrigation.

Families with loved ones buried there informed their local representatives of the substandard conditions and brown grass. The Department of Veterans Affairs sought the expertise of the U.S. Army Corps of Engineers. New York District is replacing more than 30 8-inch valves, installing a new irrigation system to

several of the burial sections, and building a new pump station to replace the cemetery's older pump station.

"The cemetery's landscape had significant deterioration because of a lack of a proper irrigation system," said Anthony DelVecchio, project engineer.

"The grass at the cemetery was watered using water cannon trucks," said Anthony Ciorra, chief of the district's Civil Works Branch. "This method of irrigation is not effective in keeping the grass green during the summer months. The result is brown grass."

"Our mission was to help correct this deficiency," said DelVecchio. "We used our in-house expertise to design new automatic irrigation systems in several of the main burial sections. Last year, several of the cemetery's burial sections got automatic site irrigation systems that are currently being used."

For the last phases of the project they wanted to negotiate a firm-fixed price with the contractor, but were unable to successfully negotiate an agreeable price for one of the phases. As a result, the project team combined the last two phases of the project into



A new irrigation system will improve the grass conditions at Calverton Cemetery.

one project. Combining the phases allowed them to save money in contractor overhead and supervision, which helped to award the project.

The work is expected to be completed at the end of the year and, when completed, the new irrigation system will be maintained by the cemetery staff.

"Next Veteran's Day when visitors visit the cemetery, they will see greener grass near the graves of their loved ones," said Ciorra.