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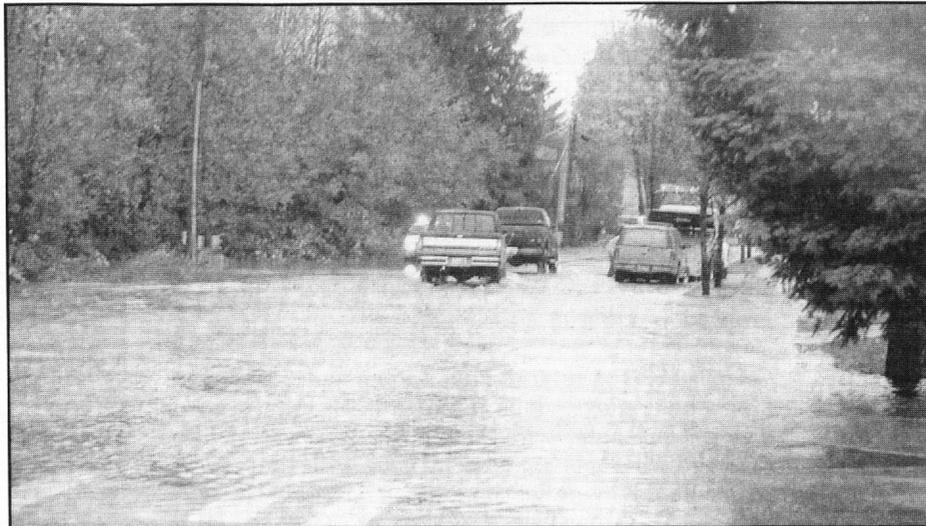
Record storms challenge Seattle District

Record rains and roaring rivers tested the mettle of Seattle District in November. The region is known for wet weather, so the district has an experienced emergency management staff, with a cadre trained in flood response.

Pineapple Express. The storms started with a classic Pineapple Express, a chain of tropical weather stretching from Hawaii to the Pacific Northwest. A series of storms followed every few days, adding more water to saturated levees and rivers, and damaging roads, homes, farms, bridges, and water and sewage treatment plants.

In Washington State, Gov. Christine Gregoire declared a state of emergency in 24 counties. She then asked that 11 counties be declared federal disaster areas. Two deaths were attributed to the massive storm, and more than 100 homes were destroyed.

"We saw extraordinary rainfall with the weather patterns giving us one storm system after another," said Larry Schick, district meteorologist. "The Pineapple Express was a big event, and likely the biggest for most of Western Washington since the historic floods of 1996 or even the epic 1990 floods. In some basins, all-time record high flows were seen. This was the wettest month ever recorded at Howard Hanson Dam, receiving more than 27 inches in November."



The surprise heavy rains in November flooded this intersection in Seattle. (Photo by Casandra Brewster, Seattle District)

November is usually wet, but November 2006 will go down in the history books as the wettest month ever for Seattle, with more than a foot of rain in as many days, and a total rainfall of more than 15 inches.

Flood fight. For Doug Weber, natural disaster manager, the time that the flood fight teams in the eight river basins spent in yearly training and coordination paid off.

Some river basins had just completed flood awareness training, but in the Wynoochee River Basin in northwest

Washington, it became the real thing.

The flood fight started on Nov. 5 and ended Nov. 17. The critical next step was to check the condition of the levees. Even with the flood waters receding, the fall flood season was in full swing and time was of the essence. Twenty-six flood engineers spent Nov. 18-19 assessing more than 120 levees in eight river basins on the Nooksack, Skagit, Snohomish, Puyallup, Chehalis, Olympic Peninsula, Cedar-Green, and Yakima-Naches rivers.

The teams, working with county emergency management officials, as-

sessed levee damages, prioritized work, and identified structures that needed repair, including temporary repairs. They found that nearly \$13 million dollars in repairs were needed.

At Mud Mountain Dam on the White River and Howard A. Hanson flood damage reduction dam on the Green River, more than a million dollars is needed to clean up damaged roads and tons of debris that came into the reservoirs after the storm. At Mud Mountain, a mile-and-a-half of woody debris stretched up the reservoir.

Diane Parks, chief of Operations Division, learned a lesson from a flood earlier this year. The lesson was to communicate early and often with local officials and the public when the operation of a Corps project could affect them.

And with flood waters filling Mud Mountain Dam to 70 percent and more rain coming, the Corps needed to aggressively release water. The high flows were a concern to residents below the dam, and Parks spent several evenings and the weekend in Pacific, Wash., providing reassurance and information about the water releases.

Reservoir Control Center. "The Reservoir Control Center (RCC) is the hub and first line of communication during flood fighting efforts to moni-

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NY District assists grounded *Intrepid*

The historic aircraft carrier USS *Intrepid* fought in World War II, the Korean War, the Vietnam War, and the Cold War. Then one day, the Gray Lady needed help from New York District.

During World War II in the Pacific, the *Intrepid* (CV-11) survived five Japanese kamikaze attacks. It also completed three tours in the Vietnam War. Its crew tracked Soviet submarines during the Cold War, and served as NASA's prime recovery vessel for Mercury and Gemini capsules in the 1960s.

The 27,200 ton aircraft carrier was decommissioned in 1974. In 1978, real estate mogul Zachary Fisher formed the *Intrepid* Museum Foundation to save the historic ship from scrap yard.

Four years later, the foundation opened the *Intrepid* Sea-Air-Space Museum in New York City, now the world's largest naval museum. The ship was berthed on the Hudson River at Pier 86. At that time, the West Side of Manhattan was the dark side of the moon. Since then, the *Intrepid* has brought public access to the Hudson River and made a positive economic impact in the area. Since its location there, Hudson River Park was established, and a new passenger ship terminal has been built.

The *Intrepid* Museum Foundation needs to refurbish the ship and its pier, a \$60 million upgrade that will take two years. In August, the foundation received a federal permit from New York District to



The Corps' vessel *Gelberman* floats near the starboard stern of the *Intrepid* as tugboats maneuver to move the 925-foot aircraft carrier from its berth in Manhattan. (Photo by Dan Desmet, New York District)

dredge an area from the berthing area out to the main channel in the Hudson River to facilitate moving the vessel to Bayonne, N.J.

Plans for an "Intrepid on Leave" extravaganza included an elaborate send-off of the 925-foot-long vessel to its temporary home. She would be escorted by a flotilla of New York boats, including five Corps workboats, police department patrol boats, Coast Guard cutters, and news media boats.

Seven tugboats began to pull the *Intrepid* stern-first from Pier 86. The massive aircraft carrier moved about 15 feet before her four giant propellers, each 16 feet in diameter, dug into the sediment, creating a "speed bump" of mud under the hull.

The Gray Lady was literally stuck in the mud, and the tugboats could not budge her any further.

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Insights

Preparation, understanding ease reunions

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

During the holiday season, many people travel to visit family and other folks that they haven't seen in a long time. The perils of such reunions are well-known, but there is a group for whom such reunions are a way of life – the members of our armed services as they return from overseas postings and other deployments.

And today, U.S. Army Corps of Engineers Civilians also understand such issues as they constantly deploy to and return from Afghanistan, Iraq, the Gulf Coast, and other disaster areas.

With deployments continuing and the likelihood they will continue for some time, reunion with family and reintegration into "normal" society remain important issues. Because this topic is so significant, I want to discuss how we can prepare to make returning home as trouble free as possible, and to find emotional healing when necessary.

Preparation. Preparing for returning home really begins before deployment.

As Lt. Gen. Carl Strock, the Chief of Engineers, often points out, a strong Army family that can take care of things back home allows the deployed Soldier (or Civilian) to concentrate on the mission and do the job he or she was sent to do. Strong families are essential to the Army accomplishing its mission.

Strong relationships *must* be built *before* the deployment. Separation does *not* help a bad relationship — it just makes it *worse*. The first thing to do is take steps to build strong, healthy relationships with your spouse, children, parents, girlfriend, boyfriend, or fiancée. If you are having problems in a relationship, get help from a professional, a marriage or family counselor, chaplain, or pastor. Work through the issues *now*, before deployment is even in the picture.

Work to improve your relationship even when it is already healthy. Keep communications open, and do enjoyable things together. Spouses, keep romance alive; make plans together in case of deployment; spend time with your children; help your family understand the Army and what you do.

Pre-deployment. In the pre-deployment phase, a number of important things need to be done for family readiness. These include making sure the family is connected to family support groups, rear detachments, and has necessary information. I want to concentrate, however, on relationships and preparing in pre-deployment time for re-deployment and returning home.

Talking with family members about the deployment and separation is critical. Spouses need to be open and realistic about changes that will take place. It is important to discuss those changes. The spouse staying home will become more independent and take on roles and make decisions that were the responsibility of the deployed spouse. The home spouse may get a job or change jobs, go back to school, purchase things for the house, make new friends, change his or her appearance, make parenting and financial

decisions on his/her own.

It is important that both people understand that changes like this will take place and not be surprised by them. Making plans ahead of time, like putting together a budget; agreeing on limits to credit card use; who to turn to for help; keeping in touch while deployed. This can help mitigate issues upon return.

It is also important to make sure the home spouse knows how to take over responsibilities that the deployed spouse did, whether that is taking care of the car, doing the taxes, balancing the checkbook, paying household bills, cooking, or taking care of the children. These things should not be taken for granted, but discussed and planned.

Children. Children have their own issues when a parent deploys. It is important to build a good loving relationship with them before deployment. Be involved with them and spend time with them now. In pre-deployment, let them know how long you will be away and when you expect to return. Show them on a globe where you will be. Reassure them of your love.

They may be concerned for your safety. Do not burden them with worries about the dangers. Some adult burdens children should not bear. Reassure them that you and your spouse will take care of them.

Let them help you pack. Listen to them, accept their feelings and talk to them about it. Give them some pre-addressed envelopes to send you letters, school work, and pictures. Give them your expectations of behavior and cooperation with your spouse in your absence.

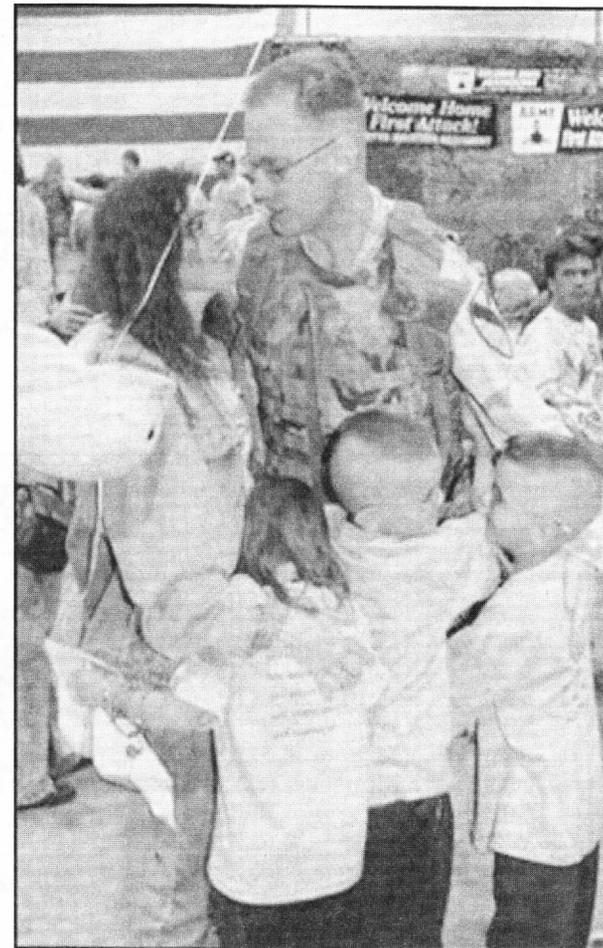
Take them on a tour of your unit and workplace. Spend time with each child individually before you go. Leave something of yours with them — a cap, a T-shirt, or baseball mitt. Make sure you have pictures of them and they have pictures of you. Visit their school and go to special activities with them before you deploy. All of this reinforces your relationship with them and comforts them.

Deployment. During deployment, it is important to keep communications open through letters, e-mails and phone calls when possible. Keep each other informed, but try to keep the communications *positive*. Remember that the deployed spouse does not need to be burdened with a lot of problems back home, and the home spouse does not need to have extra worries about your well-being.

The deployed spouse needs to concentrate on the mission. Keep yourself healthy. Exercise regularly. Keep a routine that gives order and discipline to your life.

The home spouse needs to stay busy and occupied with positive things. Consider volunteering with the family support group, the chapel, church, or other helping organization. Consider taking classes, learning a sport or craft. Exercise regularly. Like your deployed spouse, keep a routine.

Return. As you move toward re-deployment, remember those discussions you had about the changes you can expect and begin to prepare yourself for them. Make a plan ahead of time for your return to the



A Soldier greets his family at Fort Hood, Texas, as he returns home from Iraq. (U.S. Army Photo)

family. Communicate with your spouse so that you plan ahead together as far as possible.

Upon return you will certainly find things different. Expect it and be flexible. Be patient and take things slowly. If you return expecting to just pick up where you left off, you will set yourself up for difficulty and loss. It is unrealistic to expect things will be as they were when you deployed.

The deployed member should communicate as accurately as possible the details of the return schedule and keep your family updated on changes.

Be prepared to do something special for the returning person, a welcome banner and special meal. The returning person might consider special gifts for the family. Do not be surprised if the returning person is too tired to appreciate fully the special plans at first. Be understanding, forgiving, and give time for rest.

The returning family member should be positive toward the family. Look for positive changes and praise the children for their growth and accomplishments. Express your appreciation to your spouse for carrying on in your absence. Make time for your family and try to understand how they have changed. Ease back into the relationship with your family.

Above all, talk with your spouse and keep communications open. Young children may not warm up to you at first. They may see you as a stranger. Take your time to get to know them and do something special with each one separately.

Take intimacy slowly. Try to rekindle the relationship and romance with your spouse by dating and doing special things together.

Be careful with your spending and don't overdo it. Avoid excessive alcohol consumption; it can significantly harm relationships. Don't over-schedule yourself; find activities you enjoy that help you relax.

The home spouse can expect changes in the returning person as well. Be patient with your returning spouse or loved one. Give the time they need

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Chief of Engineers' Holiday Message

You have made a difference this year

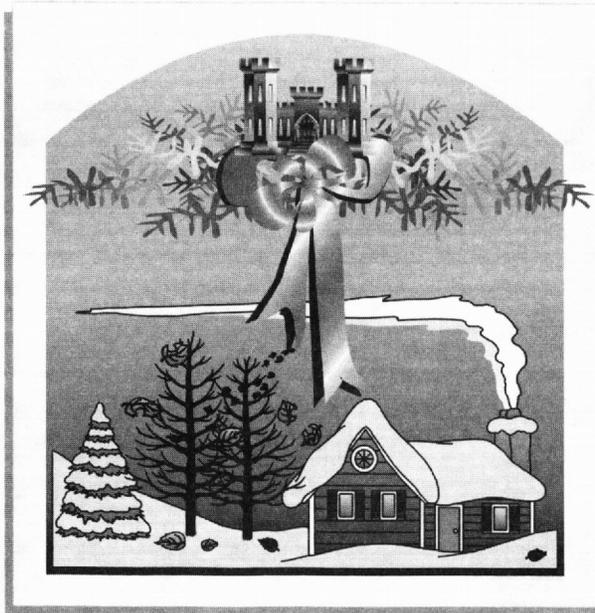
The holidays are traditionally a time to pause and reflect on the events of the previous year, and to consider the challenges that the coming year might bring.

As all of you know, this summer I announced my plans to retire from the Army, so this will be the last holiday message that I will write to the Corps family. Leading this organization of dedicated professionals, who care so much and go above and beyond the call of duty to serve this nation and to help each other, is the best job an Army officer could have. I am personally grateful that the Chief of Engineers is the capstone of my 35-year career, and grateful to all those who I have worked with in the Corps.

This year, you continued your history of service to the Army and the nation. You responded to a wide variety of missions and challenges all over the world, as you have every year. In every instance, your efforts had a direct, positive effect on those you served.

After the landslide in the Philippines, a geoscience team deployed to determine hillside stability so that rescue workers could operate safely. Here in the States, you responded when tornadoes struck Missouri and Arkansas and, as I write this message, many of you are responding to heavy rain and floods in the Pacific Northwest, dispensing thousands of sandbags and preparing to bring in heavy equipment.

I was especially gratified to see you help each other when a surprise October snowstorm struck Western New York. Buffalo District organized Operation Good Neighbor to match employees with needs with other



employees who could help. In addition, Corps responders helped the region with emergency power and debris removal.

These are not the only ways that your work has benefited others this year.

Thanks to you, children on the Gulf Coast started school on time this year in temporary school structures built by the Corps of Engineers. Thanks to you,

Kaumalapau Harbor, the lifeline for the island of Lanai in Hawaii, is secure behind a Corps-built breakwater. Thanks to you, Sailors and Marines and their families in Bahrain enjoy a new Installation Service Support Center similar to a Stateside shopping mall.

You did all of this and more in addition to your normal duties of serving the Army and America, notably maintaining a heavy schedule of reconstruction in New Orleans and the Gulf Coast, and Corps personnel are already hard at work building the facilities needed to support Army Transformation. That workload will increase rapidly in the future.

As I said, no one could ask for a better organization or better people to lead. The coming year will bring more challenges, but I have no doubt that our unique combination of personal compassion, technical expertise, and history of service will meet those challenges as well as we always have in the past.

To prepare for those challenges, take time this holiday season to relax and enjoy being with friends and family. Please remember that the holidays are a time of increased travel and greater stress, so be careful and take care of yourselves.

My family joins me in wishing you a safe and joyous holiday season, and a happy, prosperous New Year.

Essays!

CARL A. STROCK
Lieutenant General, USA
Commanding

Intrepid

Continued from page one

Bill White, president of the Intrepid Museum Foundation, immediately called Pentagon officials for assistance, and New York District was tapped to provide engineering and technical support.

District Engineer Col. Aniello Tortora; Tom Creamer, Chief of Operations Division; and Peter Shugert, Chief of Public Affairs arrived on the scene within two hours and worked with Intrepid Museum officials to provide tactical and public affairs support. Maj.(P) Leonard Law, Deputy District Engineer, provided key leadership assistance.

It was generally recognized that because the *In-*

trepid was grounded, its extraction from the mud had become a salvage operation, and that the Navy had the unique knowledge required for the re-floating of an aircraft carrier. The Secretary of the Navy tasked the Naval Sea Systems Command for the salvage effort.

During the following week, divers under contract to the Navy surveyed below the water line and inspected the vessel. Their examination confirmed that the *Gray Lady's* propellers were fully encased in thick mud.

New York District and Navy salvage officials devised a three-prong plan. First, dig a trench on the

south side of the vessel from *Intrepid's* stern to beyond the propellers. Second, use a drag bar to drag under the stern and scrape or rake the sediment out. Third, vacuum the sediment from the stern to under and around the propellers.

Once dredged sediment was brought to the surface, it was placed on New York City Department of Sanitation barges and processed before being transported to Staten Island's Fresh Kills Landfill for beneficial reuse.

"The Corps performed this emergency operation in an environmentally sound way," said Creamer. "We were constantly in touch with all of the regulatory authorities."

Creamer worked 20-hour days facilitating Operation Rescue, providing technical assistance on regulatory matters, tactical advice to Navy and *Intrepid* officials, tracking and locating barges on weekends so that the dredging cycle could continue. He even did a number of television interviews, as did Law.

"It was a deeply disappointing day for *Intrepid* officials when it got stuck," said Shugert.

However, there was a silver lining. "There was enormous press attention," Shugert said. "We had CNN broadcasting live from our Corps vessel *Hocking* for four-and-a-half hours on Operation Rescue, and heavy, positive press coverage of the Corps, Navy, and *Intrepid* partnership to free the *Gray Lady*. World opinion has rallied behind all attempts to send it on its next voyage."

Intrepid officials were even getting e-mail messages of encouragement from the Vatican, and hundreds of suggestions on how to free the ship.

"The Intrepid Museum is thankful to the Army Corps of Engineers and the Navy for the great help they are providing to this effort," said Arnold Fisher, chairman of the Intrepid Sea, Air & Space Museum.

Early this December, all of the silt is expected to be removed and the ship will be ready for tow to Bayonne during high tide.

(Peter Shugert, Vince Elias and JoAnne Castagna of the New York District Public Affairs Office all contributed to this article.)

Insights

Continued from previous page

to rest and recuperate. Keep talking and communicating, but do not try to force conversation about the deployment. Let that come naturally.

Be understanding and forgiving if the returning spouse feels left out and even a little hurt at how well you managed without them. Over time, work together to integrate the returning spouse into the family and work out relationships. Make time to do special things you like to do together. If problems develop, do not hesitate to get professional help from a counselor, pastor or chaplain.

PTSD. Some people who have been in particularly difficult circumstances may suffer from Post Traumatic Stress Disorder (PTSD). It is important to know that PTSD is *not* a mental illness. People can suffer from the effects of extreme stress to varying degrees from relatively mild PTSD to severe and debilitating problems.

Individuals react to stresses differently. Some major symptoms of PTSD are depression, anger, isolation and alienation, sleep disturbances, emotional withdrawal, hyper-alertness, memory impairment, flashbacks, survivor guilt, poor self-image, relationship problems, loss of interest in work, problems with

authority, suicidal feelings, and high-risk behaviors.

People suffering from PTSD will not necessarily exhibit all of these. The symptoms may go away on their own. However, anyone suffering from any of these symptoms would be well-advised to seek professional psychiatric counseling.

Spouses and family members can help in the journey toward healing by understanding PTSD and knowing what it does to your loved one. You must be aware of the symptoms and triggers that bring on the anxiety, tension, fear, and flashbacks. The empathy, love and support of spouses and family members are crucial in healing.

It is vitally important that our deployed people know that they are loved and supported by their families so they can concentrate on the mission at hand. Family deployment and reunion planning, patience, understanding, open communications, and above all love and commitment will help overcome problems resulting from deployment, separation, and reunion, and keep family bonds strong and healthy.

(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.)

Publications Depot

'We literally could *not* do our job without the Publications Depot.'

Article by Bernard Tate
Headquarters
Photos by F.T. Eyre
HECSA

Few offices in the U.S. Army Corps of Engineers can say that everyone in USACE has held their work in their hands. But the Publications Depot can make that claim. The depot is a little-known office whose mission is vital to Corps operations. They store all printed forms and publications used by the Corps, and distribute them to any district, division, lake, lab, or office that requests them.

"We literally could *not* do our job without the Publications Depot," said Lynda Nutt, manager of the USACE National Operations Center for Water Safety. "I provide the material, but to get the economies of scale, we do huge bulk printings that go in drop shipments to the Publications Depot. Then the safety offices and park rangers and public affair specialists order what they need in big quantities.

"For example, last year we distributed 800,000 Bobber the Water Safety Dog coloring books, and that is just *one* of the products we offer," Nutt added. "We have about 25 products each year — coloring books, coloring sheets, posters, DVDs, stick-on tattoos, videos, and more. Just a wide assortment of things, and the Publications Depot handles all of that."

For a place that is so important, the Publications Depot is hard to find. A 15-minute drive from Headquarters in downtown Washington, DC puts you in a bleak, charmless warehouse district on the Maryland side of the Potomac River. A left turn onto a street that's just one notch up from a dirt road, beaten to pieces by dump trucks and rough as any back road in the Appalachian Mountains. Over a frame-dragging railroad crossing, and across the street from a rock quarry, stands a grim brick hulk. The white "Publications Depot" sign looks like a postage stamp on its featureless façade.

Inside looks like the National Archives scene at the end of "Raiders of the Lost Ark" — deep canyons and towering cliffs of boxes in a cavernous 11,865-square-foot warehouse.

The six people who work here manage a mind-boggling array of material. Their supervisor, Hector Hunt, lists a few during a tour of the facility. Besides storing and distributing all water safety information used by the Corps, the Publications Depot team also handles all photocopier paper used by Headquarters in DC and the Humphries Engineer Center Support Activity in Virginia; all publications that go to the field including the *Engineer Update*; all historical information including all archives of former employees; all official stationary used by the Corps' generals; and all certificates of promotion or retirement.

In all, about 1,500 different items are



(Above) This is just a small sample of the many publications and archives stored in the Publications Depot. (Right) Willie Wright uses a forklift to unload a pallet of water safety publications.

stored in the Publications Depot, including 3,824 boxes of water safety information. "Almost everything that the government prints comes here, except classified material," said Hunt.

The quiet, neat offices of the Publications Depot are a marked contrast to the non-descript environment outside. In fact, everything here is neat and well-organized — it *must* be, to keep track of everything and accomplish their mission efficiently.

December is the beginning of their annual crunch time.

"Our work load is steady throughout the year, except when we're dealing with the water safety materials," said Hunt. "That becomes our priority, except for our regular deliveries, or if we get an order from a general, or someone needs a shipment for a conference. Then we cut loose someone to take care of that. We still serve the public and the districts and divisions, but we're dealing water safety materials from now until about June."

"It's labor-intensive, and it takes every hand we have," said Vickie Lomax, the supply technician and the only woman in the publications Depot. "Vickie is a clerk, but she also works out there," Hunt added. "She has to lift and pack boxes, too."

"We gain economies of scale from using the Publications Depot," said Nutt. "We can do mass mailings from a central location. We can have that instant catalog that we update because with the depot's cooperation we can make the whole thing Web-based."

"The money savings are substantial with centralized distribution," said Eugene Goff, lead park ranger at The Dalles/John Day willow Creek Project in Portland District. He is currently in headquarters in a career assignment program. "It's a one-stop shop, so we



don't have people going to all kinds of different places to place an order. Also, there is inventory control."

The Publications Depot has been in this location since 1984, and the team has seen the operation change a lot in that time.

"Where we used to get hundreds of pieces of mail every day, we don't have to do that any more," said Lomax. "Most of our requests are electronic now, either by e-mail or fax."

"We're able to get items to the customer faster," said Hunt. "We now use FedEx ground, and it's a four-day turn-around, sometimes just two days. We also use the Post Office, and now their turn-around is faster. We send our shipments out fourth-class mail, but now even fourth class mail is getting there in two or three days. It used to take a week."

But in some ways things haven't changed at all.

"The Internet has modernized a lot of things, but in many cases you still need old-fashioned methods," said Lomax. "There are some publications

and forms that are available on-line, but there are some that just can't be printed out on-line. For example, the *Health and Safety Requirements Manual* is an important publication, and it's quite big, and people don't want to print it out. They would rather come to us and get a hard-copy.

"And some people don't have a computer, or don't have the software to download forms and publications, or they don't have a good printer," Lomax added. "And we have a large population of retirees who would rather have a hard-copy to read than go on-line. So they still come to us. They're so happy when they call here and get a person instead of a voice-mail menu."

Although most of the work done by the Publications Depot team is the steady, daily reception, storage, and shipment of materials, they are famous for handling short-fuse rush jobs.

"On April 22-24, we took our park rangers and water safety message to the Pentagon," said Goff. "That was a success thanks to the depot."

"We thought we had enough material," said Nutt. "You'd be amazed how much stuff we took over there. But our rangers and their water safety message were so popular, we ran out the first day!"

"So we made an emergency call to the Publications Depot in mid-afternoon and asked, 'Can you get a shipment over here pronto?'" said Goff.

"As soon as we heard what they wanted, we loaded up the van and rushed it to the Pentagon," said Hunt.

"They did it immediately," said Goff. "They got our material to the Pentagon, through security, and to us in an amazingly short time."

That was just one of the rush orders that the Publications Depot team has handled.

"Last year they had a conference in Headquarters, and no one told us what they needed," said Hunt. "It slipped their mind. So that morning we got a panic call for boxes of paper that they needed immediately. So we dropped everything and loaded up the van and shipped it over to them."

"That's the kind of thing we do all the time," said Hunt. "We do it not only for Headquarters, but also for HECSA, the Hoffman Building, and Capitol Hill. We have never failed in doing that. Sometimes, when we get a rush order, our van is making a delivery or pick-up over at Fort Belvoir. So many times me or the other guys here will load a shipment in our own cars to make sure it gets where it's going."

That attitude all comes back to the mission of the Publications Depot.

"We are the source. We stock everything here," said Hunt. "We have never failed in doing that because we realize that it's part of the function of the Corps to supply information to our people, or to the public and agencies that need it. It is our job to make sure it gets where it needs to go."

Ft. Bliss starts huge MILCON program

By Judy Marsicano
Fort Worth District

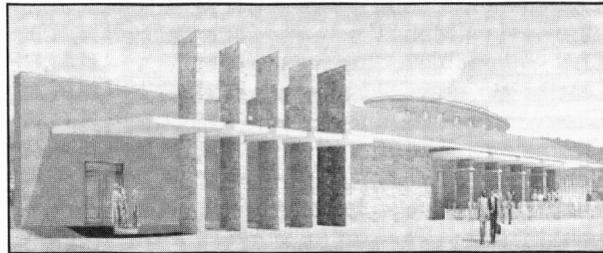
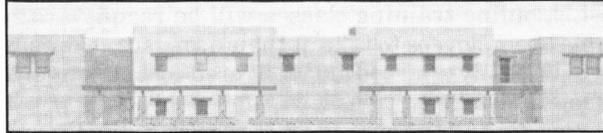
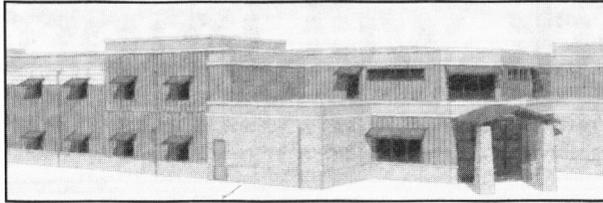
Fort Worth District, along with five other U.S. Army Corps of Engineers districts, partnered in October with the U.S. Army Air Defense Artillery Center and Fort Bliss, Texas, to mark the beginning of what may be the largest military construction program in the history of the Corps.

Ground was officially broken on Oct. 23 on the Fort Bliss Expansion Program to provide facilities for Soldiers and units relocating to Fort Bliss as part of Army Transformation.

Because Fort Bliss is on the brink of a significant population explosion, driven by the Army Modular Force, the Integrated Global Positioning and Basing Strategy, and Base Realignment and Closure initiatives, the Corps is planning, developing, and building what will amount to a small city for about 19,000 Soldiers returning to Fort Bliss from overseas installations.

Most of the growth can be attributed to restationing the 1st Armored Division from Germany. The division headquarters and four Brigade Combat Teams, plus a Combat Aviation Brigade from Fort Hood, Texas, will make Fort Bliss their home within the next five years. This substantial influx of Soldiers in a short time, along with about 27,000 family members they will bring with them, requires working, living, and community facilities including headquarters and administrative space, dining facilities, aircraft hangars, arms rooms, unit storage facilities, and barracks. When the expansion program is complete, the new development alone will surpass the main post of Fort Bliss in size, more than doubling the size of the installation.

Fort Worth District has set up a program office at Fort Bliss, sort of a mini-district, as one of the first steps in executing this multi-billion dollar program. The Fort Bliss Program Office, led by Program Di-



These are artist's conceptions of buildings planned for Fort Bliss. From top to bottom are a barracks, a company operations facility, and a dining facility. (Artwork courtesy of Fort Worth District)

rector Troy Collins, will provide direct support to the installation for all deliverables and services the Corps is providing Fort Bliss. The Corps has already awarded some \$252 million in contracts to four prime contractors, and competition among subcontractors and suppliers has begun.

New facilities to be built are provided through design-build Indefinite Delivery/Indefinite Quantity contracts set up for each type of facility, called Product Lines. Standards and criteria for each product line are provided by Corps Design Centers. Support Districts, or Product Line Districts, will provide "cradle to grave" support for task orders issued

against their product line contracts. On-site Resident Offices will administer execution of all site and product line task orders.

"We're managing all projects in the program using the USACE Project Management Business Process, putting into play the program's construction management plan as a roadmap integrating all the Product Line Districts," said Collins. "By managing the construction work at Fort Bliss as a program, the Corps will provide consistency, coherence, and project integration across all the projects."

Five Corps districts are at work in this construction program. Fort Worth District will be responsible for infrastructure, barracks, and training ranges, plus providing a central point of contact and coordinating the activities of the other Product Line Districts. Albuquerque District will be responsible for company operations facilities, Galveston District for ammunition storage and parking facilities, Little Rock District for dining facilities and aircraft hangars, Sacramento District for brigade and battalion headquarters buildings and unit storage facilities, and Tulsa District for maintenance facilities.

At the groundbreaking ceremony, Brig. Gen. Jeffrey Dorko, commander of Southwestern Division, explained the importance of the program.

"We're breaking ground because of the scope and everything that's going on with this expansion, such as 300 buildings, 15 ranges, 46,000 linear feet of water line, 22,000 linear feet of sewer line, 66,000 linear feet of gas line and 1.5 million linear feet of electrical lines," Dorko said. "The Corps was issued a challenge to ensure all this was done properly and to find a way to provide construction quickly, of incredibly high quality, and at a lesser cost. And we must do it in a way that honors the environment and takes care of all the other requirements we have to be good stewards of the nation's resources, whether that be the natural environment, or taking care of our most precious resource, the American Soldier."

WRDA celebrates 20-year anniversary

By Matthew Percy
Office of History

The Water Resources Development Act of 1986 (WRDA 86) turns 20 this year.

The act provided congressional authorization for U.S. Army Corps of Engineer projects across the nation, and marked a major and enduring shift in the nation's attitude toward water resource planning.

Signed on Nov. 17, 1986, by President Ronald Reagan, the bipartisan legislation reflected a growing consensus that local stakeholders should bear more of the financial and management burdens of waterway projects, and that environmental considerations were intrinsic to water resources planning.

The centerpiece of this legislation was a set of cost-sharing provisions that promoted a more efficient use of tax dollars. Additional provisions included imposing *ad valorem* cargo taxes to maintain harbors, increases in fuel barge taxes to support inland lock and dam projects, and various other fiscal reforms designed to elicit greater participation by ports, communities, waterway interests, and states in the financing of water projects.

To balance requirements for greater non-federal financial shares in the costs of studies and projects, WRDA-86 gave sponsors a key role in project planning and design.

After the previous 16 years without any major authorization for new civil works water resources construction projects, WRDA-86 also ushered in a torrent of new projects. It authorized \$16 billion in spending for more than 377 water projects, including 43 port projects, seven inland waterway projects,



Photo courtesy of the Office of History

(Right) President Ronald Reagan signs the Water Resources Development Act of 1986. With him are Congressional sponsors and Robert Dawson, Assistant Secretary of the Army (Civil Works), fourth from right. (Left) Seven Oaks Dam in San Bernardino, Calif., was approved for construction in WRDA-86.

115 flood control projects, 24 shoreline protection projects, and 61 water resources conservation and development projects.

Some of the more notable of these were the Environmental Management Program (EMP) for the Upper Mississippi River system; a new large lock at Sault Sainte Marie, Mich.; significant navigation improvements along the Lower Mississippi River; and the Seven Oaks Dam in San Bernardino County, Calif.

The law included reforms to make the Corps' civil works program more environmentally friendly as well. It established requirements and guidelines for addressing mitigation measures for fish and wildlife adversely affected by water resource projects, and

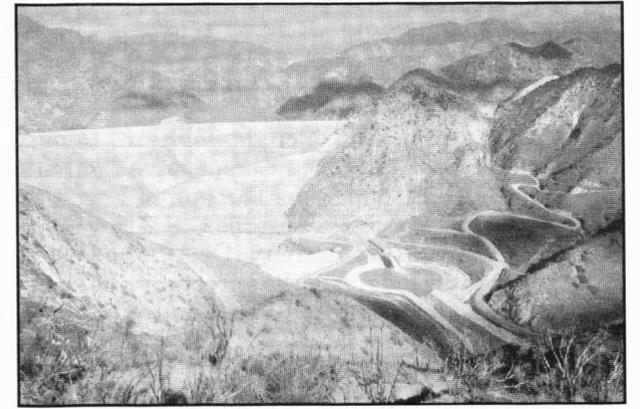


Photo by Steve Schumaker

enabled the Corps to modify the structures and operations of its projects to improve the quality of the environment.

"WRDA-86 brought out the best in the Corps," said Robert Dawson, the Assistant Secretary of the Army (Civil Works) in 1986, who helped shepherd the bill from negotiation to enactment. "It was a time of great change, and the Corps as an institution showed its capacity to change and deal with reality. There were people who didn't want to change, but the Corps to its great credit saw the need for change and went to battle stations."

After 20 years, WRDA-86 has lived up to its initial billing as "landmark legislation" in the development of the nation's water resource policy.

H. Romer

New network will improve training

By Karen Northup
Seattle District

For the past 18 months, a U.S. Army Corps of Engineers team has worked on making a Web-based system available Corps-wide for learning and training. It is called the Enhanced Learning Network (ELN) and it complements the Automated Training Management System (ATMP) that many are already using. The ELN is a one-stop, cost-effective access to learning resources, putting training more in the hands of the individual and managers.

What is ELN? It is a learning management system that has the capability to transform training and learning throughout the Corps. The goal of ELN is to enhance organizational performance (1) by providing Corps' team members easy, one-stop access to learning resources from their desktops, and (2) by enhancing our ability to manage the execution of our training plans linked to the Mission Essential Task List (METL).

ELN is supported by Oracle iLearning software, a commercial off-the-shelf application.

What do we mean by learning resources? Learning resources managed by ELN include formal classroom training, online courses, access to Communities of Practice, regulations and policies, educational partners, technical, business and leadership information, career development information, job aids, manuals, and other resources needed for us to perform our jobs.

ELN will also link to e-Gov websites, Army Knowledge Online, and Army e-learning, connecting us to

courses and resources of broad applicability to federal workers.

What are some of the capabilities of ELN? On ELN, online training classes will be readily available to employees to take at their own pace. Courses will be easily updated and delivered cost effectively, keeping course tuitions low.

Besides online training courses, such as the Project Management Business Process (PMBP) curriculum, P2, and Hazardous Waste and Emergency Response, ELN will enable online registration for the USACE Learning Center (ULC, formerly PDSC) PROSPECT classroom courses, and offer the opportunity for synchronizing training with individual development plans.

ELN is configured for the addition of local and regional training, as well as corporate training programs, and gives managers the capability to monitor training progress, use, and trends with standardized reports.

Why ELN? ELN project furthers and supports two key enablers (the Learning Organization and World-Class Workforce) of the the Corps' Campaign Plan. ELN benefits all employees in all Corps mission areas.

ELN helps us address the question: How can we get more for our training dollar and meet the "just in time" needs of the field while (1) maintaining consistency and progress toward the corporate goal of sustaining technical capability; (2) best leveraging our resources to apply our expertise anytime, anywhere to meet our customers' challenges; and (3) facilitating service through use of Communities of Prac-

tice and the Regional Business Centers? That's a tall order – written to illustrate the vast capability of the ELN system.

Who's involved in ELN? A driving motivator for the ELN has been the need for the PMBP/P2 program to find a way to provide cost-effective training to the field. A partnership between Headquarters' Corporate Information, Human Resources, and the PMBP program has made this possible. With ELN, the existing ULC Virtual Campus and the existing Learning Network (<http://usaceln.org>) will be closed and migrated to the ELN. The iLearning application and the hardware are housed at Information Technology Laboratory in Vicksburg.

What's ahead? There is much work to do – including training of users; working out the details of how we will manage, administer and maintain ELN; engaging the field in using the capabilities of ELN; determining tuition structure and use guidance; and establishing how we will measure success and system deployment.

If you would like to get involved with ELN, please contact Karen Northup at karen.s.northup@usace.army.mil. We plan to deploy in phases ramping up use of the ELN over time as we learn and develop competency in its use in meeting learning and training goals.

You will hear more about what this all means to you in the coming months as we implement our communication and implementation strategy.

When? Our goal is to make ELN available to you in 2007.

A-76 News

Logistics is Corps' 1st High Performing Organization

On Nov. 7, Maj. Gen. Ronald Johnson, Deputy Commander and Delegated Competitive Sourcing Official, and Gary Anderson, Director of Logistics, signed a Letter of Obligation for the U.S. Army Corps of Engineers' Logistics Activity (ULA). The ULA is a field operating activity of the Directorate of Logistics and the Corps' first High-Performing Organization (HPO).

HPO Pilot Program. The ULA is one of eight Department of Defense (DoD) pilots under the DoD High-Performing Organization Pilot Program. Under this program, an HPO is a recognized alternative to an OMB Circular A-76 public-private competition.

An HPO uses Business Process Re-engineering to identify efficiencies and economies, and the in-house operation is not required to compete against the private sector.

LAC stand-up. The Corps began transition to the new organization in September with the stand-up of the Logistics Activity Center (LAC) in Millington, Tenn. The transition will take place in phases realigning the current logistics workforce and developing and implementing re-engineered business processes, resulting in full operational capability in March 2008.

The ULA centralizes the oversight and delivery of

logistics services traditionally done in the logistics offices around the Corps.

Work that is directly related to the civil works mission at project sites is excluded from this action, as is the work performed in support of the Global War on Terrorism at Transatlantic Center and overseas locations in Europe District, Japan Engineer District, Far East District, and the Gulf Region Division.

The logistics activities included in the ULA are lifecycle supply management, maintenance management, transportation management, emergency management, and facilities management.

Organizations & responsibilities. The organizations and their responsibilities include:

- The Directorate of Logistics, Washington, D.C., providing command and control.
- USACE Logistics Activity Center in Millington, Tenn., (the central component of the ULA) providing oversight, policy direction, and centralized service delivery.
- Regional Logistics Liaisons at the Major Subordinate Command-levels providing commander, director, and customer support and management of regional logistics resources.
- Logistics delivery points at the district/laboratory levels performing logistics duties that required on-site customer delivery and support.

High Performing Organization OKed for lock & dam O&M

In November, Maj. Gen. Ronald Johnson, Deputy Commander and Delegated Competitive Sourcing Official, announced that the Office of Management and Budget and Department of Defense had approved an alternative to the planned A-76 public-private competition for the Operations and Maintenance (O&M) of Navigation Locks and Dams.

As an alternative to competition, an in-house team will identify and implement a High-Performing Organization (HPO). Under this arrangement, employees will not have to compete against the private sector to perform the work.

Personnel with experience in the functions and nominated by commanders of the major subordinate commands will comprise the O&M of Navigation Locks and Dams HPO Development Team and will conduct the effort under a charter approved by Johnson.

The goal is to make work performed as part of the O&M of Navigation Locks and Dams functions more efficient and cost effective, and will not focus on downsizing or cutting jobs. The team will assemble in January with an expected completion by June 2008.

Around the Corps

Hazardous waste conference

The Corps and EPA invite you to submit an abstract for the 2007 Conference on Design & Construction Issues at Hazardous Waste Sites. The conference will be April 4-5, 2007, at the Loews Philadelphia Hotel in Philadelphia.

Deadline for submitting abstracts is Dec. 15. More information is available at the conference Web site [HTTP://HQ.ENVIRONMETAL.USACE.ARMY.MIL/RDRA-07](http://HQ.ENVIRONMETAL.USACE.ARMY.MIL/RDRA-07)

Abstracts, and biographies of the writers, should be submitted in Microsoft Word via e-mail to Sharon Budney at RDRA2007CONFERENCE@CDM.COM

- Abstract title must be 10 words or less, and the abstract itself must not exceed 500 words.

- The description should include the central theme of the presentation, relevance to the conference audience, and relevance to current issues in the design and construction field, particularly at hazardous waste sites.

- Abstracts with a strong commercial slant will be rejected.

- *Biography* — Each presenter must include a biography of up to 50 words providing professional background, expertise in topic area, and relevant presentation experience.

The conference will be in a panel format. EPA and the Corps anticipate up to eight panel sessions in the topic areas of project management, technology, and general design and construction issues. Three to four panelists will be selected for each panel. Each panelist should plan to prepare a 20-minute presentation (10 to 15 slides).

EPA's and the Corps' goal is to have a balanced panel. Therefore, panelists will be selected from different sectors or organizations that complement each other and provide continuity among selected topics. Presentations for each panel will be selected on these criteria:

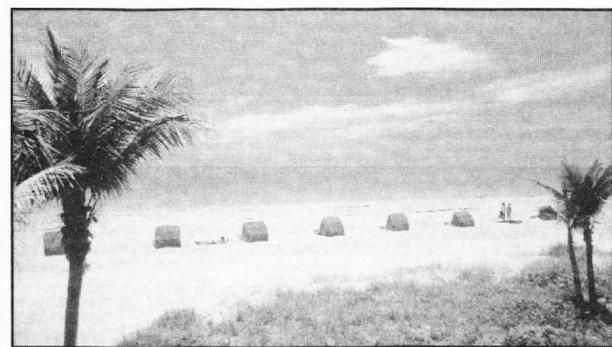
- Abstracts that demonstrate the cross-cutting applicability of methods, technologies, or lessons learned relating to design and construction at hazardous waste sites.

- Presentations that have current and topical relevance to the field and to the audience.

- Presentations that address the feasibility and ease of use at hazardous waste sites.

Presenters and those who attend the conference may wish to prepare a poster to share their company's or organization's experience in addressing design and construction issues.

The conference is free, but registration is required at the conference Web site above. Any questions can be sent to Sharon Budney at the e-mail address above.



Sunbathers enjoy the beach at Captiva Island.

Beach project awards

Jacksonville District partnered in two of six beach renourishment projects that received national awards.

The American Shore & Beach Preservation Association (ASBPA) cited Pinellas County as one of six winners in the 2006 Top Restored Beaches in America Award. Captiva Island, another Jacksonville District beach restoration project, also took a national award.

Besides providing shore protection, the restoration projects offer a tropical vacation haven for more than 12 million visitors a year. More people visit beaches than all federal and state parks combined, according to the ASBPA. Tourists at Pinellas beaches alone boost the region's economy by spending \$5.2 billion annually.

GRIDS

The Topographic Engineering Center (TEC) recently awarded an indefinite delivery/indefinite quantity contract for TEC's Geospatial Research, Integration, Development, and Support (GRIDS) development to Science Applications International Corp., Arlington, Va. The task orders under this contract will not exceed \$250 million, including option years.

The GRIDS contract has a broad scope including research, applied research and development, verification and validation, integration, testing, support of geospatial systems and services, sensor development, systems engineering, integration, material fabrication, experimentation, management assistance, and operational support.

Domain areas under GRIDS comprise (but are not limited to) topographic engineering, military intelligence, battle command, modeling and simulation, and special operations.

Besides technology, this contract encompasses work to develop and execute advanced concept technology and joint capability technology demonstrations, and new tactics, techniques, and procedures. The contract also addresses doctrine, organization, training, material, leadership, and education, personnel, and facilities issues.

The contract consists of a base year and four option years. Task orders may be issued as firm-fixed-price, cost-plus-award-fee, cost-plus-fixed-fee, and time and material based on individual requirements. The government will employ performance-based contracting methodologies whenever practical.

Dutch conference

For hundreds of years, the Dutch have fought a battle against the sea. In the past 50 years they have intensified their approach and created the Delta Works project, the most ambitious flood defense system in the world. With more than 10,250 miles of levees and more than 300 structures, it is the largest and most extensive flood protection system.

Despite the acclaim, Dutch flood protection engineers are not content. Every year they hold an engineering conference to share knowledge about the future of construction on the water.

At this year's Waterbouwdag conference, literally translated as "Water Construction Day," the Dutch called Alfred Naomi, a senior program manager with the Corps, to speak about the ongoing construction in the New Orleans delta.

"I was honored by the request," said Naomi, who is working on levee construction in and around New Orleans. "The Dutch engineers have done an outstanding job. It was unexpected and gratifying that they wanted to hear from me."

Naomi is perhaps the foremost authority on construction around New Orleans and, at the conference, shared with Dutch engineers the plan for the future. By 2010, the Corps will provide full 100-year storm protection to the area. "We're also developing a more robust levee inspection program as part of the USACE Levee Safety Program," Naomi added.

Boat christening

Celebrating an age-old tradition, two new Huntington District vessels, the Motor Vessel *Kenneth J. Eddy* and the Derrickboat *Roger R. Henry*, were dedicated and christened October 31 at Harris Riverfront



The Motor Vessel *Kenneth J. Eddy* and the Derrickboat *Roger R. Henry* docked at Harris Riverfront Park in Huntington, West Va.

Park in Huntington, West Va.

About 100 family members, friends, and Corps employees gathered to honor the men for whom these vessels were named.

Eddy began his career with the Corps in November 1928. As captain of the *M/V Robert G. West*, Eddy assisted in the Silver Bridge disaster at Point Pleasant, W.Va. in December 1967. He retired from Huntington District in October 1979 having spent nearly 50 years with the Corps.

The *M/V Eddy* is 124 feet long, 34 feet wide, with a draft of eight feet. The twin engine, 3,000 horsepower vessel will tow and tend the district's Technical Support Branch, Maintenance Section Repair Fleet on the Ohio and Kanawha rivers. The *M/V Eddy* replaces the *M/V Britton*, which has been in service for almost 30 years.

Henry began his career as a derrickboat operator with the Repair Fleet in July 1970 and was later promoted to master derrickboat operator in 1974. He also assisted in the 1967 Silver Bridge disaster. Henry retired from the Huntington District in 1989.

The *Derrickboat Henry* is 55 feet long, 52 feet wide, with a draft of four feet. It is designed for moving equipment and materials quickly. With a lifting capacity of 20 tons, it is a significant acquisition to the Huntington District Repair Fleet. The *Derrickboat Henry* replaces *Derrickboat #49*, which has been in service for more than 50 years.

Corps/Agriculture partnership

St. Paul District, the Department of Agriculture's Rural Development Office, and the Glidden Sanitary District No. 1 of Glidden, Wis., worked together on a joint water project. The \$1.1 million project included replacing Glidden's 90-year-old water distribution system, where 45 percent of the water was lost through leakage.

The project included building 3,400 feet of six-inch water mains, a 50,000 gallon elevated reservoir, three manholes and control valves, and five new fire hydrants. It also replaced 14 old fire hydrants and refurbished two lift stations.

Corps' projects like this are authorized and funded under the Northern Wisconsin Section 154 of the Consolidated Appropriations Act of 2001. The program authorizes design and construction assistance to local governments for water-related environmental infrastructure and resource projection projects in the four northern counties of Wisconsin's 7th Congressional District.

The Rural Development Office partnered with the Corps and contributed about \$1.5 million. This was used to upgrade and improve Glidden's water distribution system, and make improvements to the entire community. The office provides utility grants and loans to qualified communities with populations under 10,000.

Referee runs on & off basketball court

By Mark Davidson
St. Paul District

Why does Jodi Kormanik run?

Does she run on the basketball court as a referee to stay in shape for marathons? Or does she run in marathons and other races to stay in shape for refereeing basketball?

On June 17, Kormanik ran in her second Grandma's Marathon in Duluth, Minn. It was the marathon's 30th anniversary and a record 7,206 runners started the 26.2-mile race.

"I finished in 4:53:54," said Kormanik a hydraulic engineer in the Water Control Section of St. Paul District. "Not as good as I wanted to, but the conditions were brutal. For the first time in Grandma's history the black flag was raised. This was an extreme warning for the runners due to the heat and humidity."

The female marathon winner, Halina Karnatsevich took the lead right from the gun and won with a time of 2:33:39. Kormanik and 6,912 other runners finished the race. She finished in 4,784 place out of all of the runners. Of the 2,607 female finishers, she placed 1,580.

Kormanik runs in marathons (26.2 miles), half-marathons (13.1 miles), marathons, 10Ks (6.2 miles), and other races about 10 times a year. She runs about 20 miles a week to stay in shape for the races.

"I actually just started running in January 2005," said Kormanik. "Before then, I guess the longest I had run was maybe two miles. I found running to be a great stress reliever. It's something you can do that gives you time to think or not think; you can do it alone or with a friend; and the only cost are new running shoes every three months."

November floods

Continued from page one

tor, inform, and assess data," said hydrologist Lynn Melder. The RCC coordinates and regulates Corps' dams, reservoirs, and other projects during floods.

With predictions calling for flooding throughout western Washington, the RCC began 24-hour operation Nov. 5 and continued through Nov. 8.

"The RCC reduces flood damage by storing the peak flood waters behind the dam during a flood, then safely releasing the water in a controlled and regulated way after the event," said Schick. The Corps works in coordination with local cities, counties, and state governments to notify the public when they release water.

During floods, Seattle District regulates not only its own flood reduction dams (Howard Hanson and Mud Mountain dams), but also assumes control of Upper Baker and Ross dams on the Skagit River, and Wynoochee Dam on the Wynoochee River.

In the Skagit River basin, the Corps held flows to Upper Baker and Ross dams to minimum outflows until the Skagit peaked, reducing the flood stage downstream at Concrete, Wash., by about five feet.

When inflows peaked at Wynoochee Dam at 13,000 cubic feet per second (cfs), the Corps held back outflow, reducing the river stage downstream by about six feet.

Howard Hanson Dam on the Green River received peak inflows of 24,000 cfs, and the Corps held outflows to as low as 5,000 cfs, reducing the flood stage in Auburn, Wash., by seven feet.

Mud Mountain Dam reduced the flood stage downstream in Puyallup by more than four feet. Peak inflows to Mud Mountain Dam were 29,000 cfs, and the dam held outflow to less than 1,000 cfs.

The RCC staff returned Skagit and Wynoochee dams to local control after the flood threat ended, but they continue to operate Howard Hanson and Mud Moun-

But competitive running is not Kormanik's only athletic activity. She is also a basketball referee. She was a referee five years ago for just one season of springtime American Athletic Union basketball games, mostly on the weekends.

"Then, this past basketball season I decided to take it more seriously and I became a Minnesota State High School League basketball official," said Kormanik. "I started contracting games from various basketball organizations, and even refereed one varsity high school girls' game during this past winter season."

Even though the high school basketball leagues are not going on now, Kormanik is officiating summer basketball about one to two weekends a month. A typical tournament will allow her to referee about eight to 10 games in two days.

"During a weekend in late June in Rochester, Minn., I refereed a total of 15 games in three days," said Kormanik. "The games that I reffed ranged from eighth grade to high school varsity, both girls and boys."

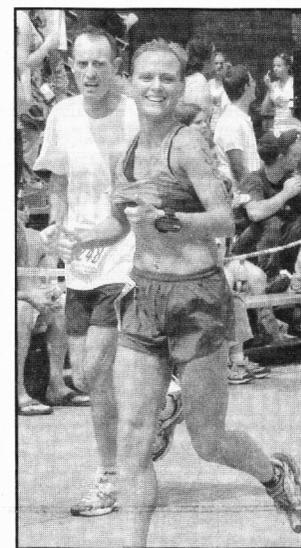
Kormanik will be attending a basketball official's camp in Duluth this summer to get ready for the coming season. She plans to referee a full-time schedule this coming basketball season. This means she will officiate one or two high school varsity games a week, plus some ninth grade, sophomore, and junior varsity games.

Kormanik herself played basketball, fast-pitch softball, soccer, and tennis in high school, and also played fast-pitch softball in junior college. A St. Paul District employee since December 1997, she knows sports and has experienced many different kinds of referees.

"I believe it takes a certain type of individual to referee," Kormanik said. "You can't give just any-



(Above) Jodi Kormanik referees an AAU basketball game. (Right) Kormanik finishes the Grandma Marathon in Duluth. (Photo courtesy of St. Paul District)



one a whistle and expect him or her to be able to call a good game, and I think that the kids out there playing should have good referees. I've made the choice to become a dedicated official that will continue to work at becoming better each year."



Skip Green, captain of the Motor Vessel *Puget* directs snagging operations. He is guiding the hook behind piers where the crane operator's vision is blocked. (Photo by Dick Devlin, Seattle District)

tain dams to allow maintenance staff to remove tons of debris washed into the reservoirs.

Debris removal. With the White River rushing through the Mud Mountain Dam 50 miles away at 12,000 cfs, Seattle District's Motor Vessel *Puget* and crew of three arrived in Tacoma's Commencement Bay in mid-November.

Earlier in the month, amid the heaviest rains on record in the Puget Sound region and with more forecast, Port of Tacoma officials requested Corps support to keep the port's major waterways clear of hazards.

The *Puget* and her crew began the monumental task of removing unimaginable volumes of debris that had been scoured out upstream in the Cascade Range by the floods, and carried into the federal channels at the Port of Tacoma by the Puyallup River.

The Puyallup empties runoff from the White River

and dozens of lesser streams and delivers it directly into Commencement Bay just south of the port's operations. The incoming tides pushed tons of debris back into the Hylebos, Blair, and Sitcum waterways, banging against container ships and threatening to foul their propellers, or worse.

The first day on station, *Puget* pulled 20 tons of organic debris from the waterways and bay, and kept up that pace for several days.

For hours, the vessel's captain, Skip Green, maneuvered *Puget* from pickup to pickup while avoiding the much larger vessels — not always easy for a converted World War II seaplane tender. The maneuvering is to get crane operator Roy Radko into position to make the snag, and then hand off the load to deckhand Brad Schultz to manhandle to the forward deck and trim off any excess length with a chainsaw.

One after another, they pulled trees, complete with root balls and leaves, some more than 90 feet long, from Commencement Bay. The crew is assigned to the district's Navigation Section, and normally works in the shipping lanes of Puget Sound doing the same task. But this time they were in a "target-rich" environment created by major floods.

As the mission wore on, much of the debris had come ashore and littered the banks around the bay, or had been run under and behind docks by incoming tides. Tied off against a pier, Green helped guide Radko to clear debris from the lee of the pier. Green used a pike, much like a logger, to stabilize and position the wood for the crane to pick up. It's not every day that a workboat's captain becomes a lumberjack.

With the day's take aboard, they headed back to a Corps-owned barge that will hold the debris until *Puget* tows it back to Seattle and turns it over to a contractor for disposal.

(Contributors to this story include Dick Devlin, Patricia Graesser, Nola Leyde, and Kayla Overton.)