



US Army Corps
of Engineers®

Engineer Update

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Corps teams respond to Fran's aftermath

Article by Tim Dugan
Mobile District
Photo by Bud Davis
Wilmington District

Even before the 115 mile-an-hour winds of Hurricane Fran subsided, the Corps of Engineers had preliminary damage assessment teams in place to survey storm-ravaged areas along the Carolina coasts.

Fran struck Cape Fear, N.C., on Sept. 5, blowing trees onto houses, destroying beach homes, knocking out power for thousands of residents, and flooding homes. The storm continued toward Raleigh, knocking hundreds of trees onto houses.

Once the winds subsided and the sun rose, engineers at Wilmington District started surveying the damage. The storm was blamed for 22 deaths, 17 of those in North Carolina. By Sept. 10, 34 counties were declared federal disaster areas and damage estimates surpassed \$1 billion.

The district opened the Raleigh Area Disaster Office to coordinate missions in Raleigh. Field offices were opened in Wilmington Sept. 18 and Goldsboro Sept. 19 to coordinate mission execution with the Federal Emergency Management Agency (FEMA) at those locales.

An eight-person Logistics Emergency Response Team (LERT) at Fort Bragg, N.C., worked out of the Forward Area Emergency Support Trailer (FAEST) No. 2 trailer to handle receiving. A four-person LERT team was on site at the district office in FAEST No. 1 trailer for contracting and mission managers, and others in trailer No. 3 for contract administration. The Emergency Operations Center (EOC) planned to use all three trailers as field offices for debris missions.

As of Sept. 16, the Corps had 157 people working in various capacities to support disaster recovery. Early missions were for water, ice, generators and debris removal. The staging area for these was at Fort Bragg, N.C. Fourteen counties required water. Fort Bragg alone required 200,000 gallons. As of Sept. 16, the total amount of water delivered was about 340,070 gallons.

There was a daily requirement of 280,000 pounds of ice in North Carolina. The total ice delivered as of Sept. 16 was 3.18 million pounds.

"Here we have better access to the things we need and better facilities," said Eddie Knight, a Hurricane Marilyn veteran who worked the water and ice missions. "The State Port in Wilmington has been one of the best assets to the mission, having the refrigerated warehouse for ice. Proper coordination is one of the biggest factors. We have to have the proper quantities at the proper times."

As of Sept. 16, 64 generators had been installed in hospitals, fire stations, emergency management centers, etc.

With all the trees down on houses, especially in the Raleigh area, tree and debris removal were



Topsail Beach in North Carolina suffered a complete overwash during Hurricane Fran, breaching the island with as many as five new inlets.

two important tasks. By Sept. 16, 41 crews were employed, 199 trucks were working, and 170 loaders. As of Sept. 16, 1,387 truckloads of debris (62,163 cubic yards) had been removed.

As of Sept. 14, 20 counties had more than 300 requests to remove trees from peoples' homes. Seven debris removal contractors were operating in the Raleigh area, and another four to be contracted for all of North Carolina.

Glen McIntosh, the debris mission manager, said the indefinite delivery order contracts require contractors to remove 5,000 cubic yards of debris a day. Mission managers estimate there are 12 million cubic yards of debris to remove and that it might take six months to complete.

The technical assistance missions included a contracting assistance team working with state and local officials in Raleigh and seven damage survey report writers.

Hurricane Fran and subsequent rainfall caused flooding along the Neuse River, particularly in Goldsboro and Kinston. Water releases were critical during the disaster. The district's Coastal, Hydraulics and Hydrology (H&H) Section staff worked long hours computing data and adjusting water releases from Corps dams that protected three water basins.

Lt. Gen. Ballard becomes 49th Chief of Engineers

Lt. Gen. Joe N. Ballard became the 49th Chief of Engineers at an assumption of command ceremony held Oct. 1 at Fort Myer, Va. Secretary of the Army Togo D. West, Jr., presided at the ceremony.

Maj. Gen. Pat M. Stevens IV has been serving as the Acting Chief of Engineers since Lt. Gen. Arthur E. Williams' retirement in June.

The Chief of Engineers occupies a unique position as a senior member of the Army Staff and as commander of a major Army command. He has Army Staff responsibility in the areas of engineering, housing, construction, real property, natural resources, and environmental programs for Department of Army. He also provides advice and assistance on military engineering and topographic matters.

As a major commander, he directs an organization of more than 500 military and approximately 39,000 civilian members with an annual program exceeding \$10 billion. Major missions of the U.S. Army Corps of Engineers include military facilities construction for the Army and Air Force; environmental restoration of current and former defense installations; and the Army's civil works program.

Lt. Gen. Ballard, who is the first African-American Chief of Engineers, is a native of Oakdale, La. He graduated from Southern University A&M College, Baton Rouge, La., in 1965 with a bachelor's degree in electrical engineering and was commissioned into the Corps of Engineers. In addition to his master's degree in engineering management from the University of Missouri, he is a graduate of the Engineer Officer Basic and Advanced Courses, the Army Command and General Staff College, and the Army War College. He is a registered professional engineer in civil engineering.

Prior to assuming command, Lt. Gen. Ballard was the Chief of Staff, United States Army Training and Doctrine Command, Fort Monroe, Va., a position he held since July 1995.

Lt. Gen. Ballard has held a wide variety of important command and staff positions, including the Commanding General of the U.S. Army Engineer Center and Fort Leonard Wood. Prior to that, he was Special Assistant to the Director of Management for the Total Army Basing Study, Office of the Chief of Staff, Washington, D.C.; Deputy Commanding General, U.S. Army Engineer Center and Fort Leonard Wood/Assistant Commandant, U.S. Army Engineer School; Assistant Deputy Chief of Staff, Engineer, Headquarters U.S.

Continued on Page 3

Continued on Page 12

Reach out

VSAT provides reliable emergency communication

By Christina Plunkett
Jacksonville District

When an emergency strikes, communications are an important element of the recovery effort. Almost every year, the Corps of Engineers deals with large-scale disasters and has learned the value of emergency communications.

HQUSACE recently designated Jacksonville District the Corps' premier emergency communications specialist. As the steward of satellite telecommunications systems, Jacksonville will ensure communication throughout the Corps during and following natural disasters and emergencies.

"The district was tasked by headquarters to house, maintain, test and prepare to quickly deploy the Corps' satellite-based system anywhere in the U.S. and Caribbean where an emergency has destroyed public communication," said Jim Cobb, Chief, Information Management.

Headquarters picked the Very Small Aperture Telecommunications (VSAT) system which allows voice, data and video communication at any location, including remote sites. "The fact that VSAT is distance-insensitive means communication can take place as easily in an inner city as on an isolated island, which makes it invaluable during emergencies," Cobb said.

When disaster strikes and everyday communication has been destroyed, communicating becomes crucial for victims and rescuers alike to understand the extent of the destruction and the relief efforts needed. The lack of timely, accurate communication can be costly, even deadly. First-hand knowledge of the importance of communication during emergencies prompted the Corps to

pick this communication system.

The frustration of unreliable communication was a lesson learned during the Hurricane Andrew recovery effort in 1992, said to be the costliest natural disaster in U.S. history. Phone lines were down in South Dade County, Fla., and cellular lines worked only sporadically, so the Corps had to rely on high frequency radios.

During this operation, headquarters began examining emergency telecommunications. Larry Broun of the headquarters' Emergency Operations Center, with the support of Ken Calabrese, headquarters' Chief of Information Infrastructure Support Division, decided to obtain an AT&T satellite system through General Services Administration.

The Corps' three VSAT systems were first put to use after Hurricane Marilyn destroyed much of the U.S. Virgin Islands and areas in Puerto Rico in September 1995. These systems, two in St. Thomas and one in St. Croix, provided the only communication for about four months.

An AT&T engineer taught the Corps' "VSAT team" (Calabrese; Cobb; Joe Branham, Jacksonville's Assistant Chief of Information Management; Tom Harvey, electronics engineer; and Bill Hill, computer systems analyst) how to install, operate and repair the systems.

"It was a true trial-by-fire learning experience for the VSAT team," said Harvey, also the team leader of communications for the district.

"During Hurricane Marilyn, the Corps responded with team members from Jacksonville District, headquarters and contract engineers to quickly provide communications in a difficult situation," Calabrese said. "Headquarters appreciates Jacksonville's work and continued support in

an area which is critical to the Corps."

The VSAT team's demonstrated proficiency during the Hurricane Marilyn recovery resulted in the district being picked to be the Corps' VSAT center. "With all the natural disasters that have occurred in the last several years, the district has acquired a lot of first-hand knowledge in all aspects of responding to emergencies," Cobb said. "Geographically, the district is also well-positioned to support the continental U.S. and Caribbean."

The VSAT team has conducted training exercises at Vicksburg and Fort Worth districts. The next demonstration is scheduled for headquarters.

Several months ago, the district purchased an additional satellite dish and cable and permanently installed them on the roof of the Federal Office Building to support testing and evaluation. "Because this is an evolving system, there are always system upgrades to be learned and tested," said Harvey.

The dish (parabolic reflector) sits on a tripod and picks up radio signals to and from the satellite, a Telstar 402. The satellite is positioned in geosynchronous orbit over the equator at 89 degrees west longitude, the best location for nationwide Corps usage. Its location allows the Corps to use VSAT as far east as the U.S. Virgin Islands and west to Hawaii.

"VSAT even makes it possible to conduct normal business operations, such as CEFMS," Cobb said. One of the three units is currently pre-positioned at the Antilles Office. This unit will be shipped to the Ponce Resident Office to aid in CEFMS operations until its current communication can be upgraded by AT&T.



Capt. Neal Thibault, former Antilles Emergency Operations Center Manager, sets up a satellite terminal in St. Thomas. (Photo by Tony Santana, Jacksonville District)



Bill Hill, computer systems analyst, and Tom Harvey, electronics engineer, make the final adjustments to the dish on the roof of the district headquarters in Jacksonville to ensure perfect alignment with Satellite K2. Satellite coverage extends from the U.S. Virgin Islands in the east to Hawaii in the west. (Photo by Christina Plunkett, Jacksonville District)

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Prime Power generates significant savings

Article by Penelope Schmitt
Center for Public Works
Photo by F.T. Eyre
HQUSACE

The Prime Power Loan Program added three 1,500-kilowatt utility-grade generators to its inventory in August, without spending a dime. The \$1.4 million in equipment was acquired through a trade-in of obsolete equipment.

Mike Hunter, Prime Power Loan Program Manager, led the effort that resulted in the trade. "When I took the program in 1994, I found that we had 13 Vietnam-era Caterpillar plants in depot storage. It had already been determined in the late '80s that it was prohibitively expensive to upgrade and recondition them."

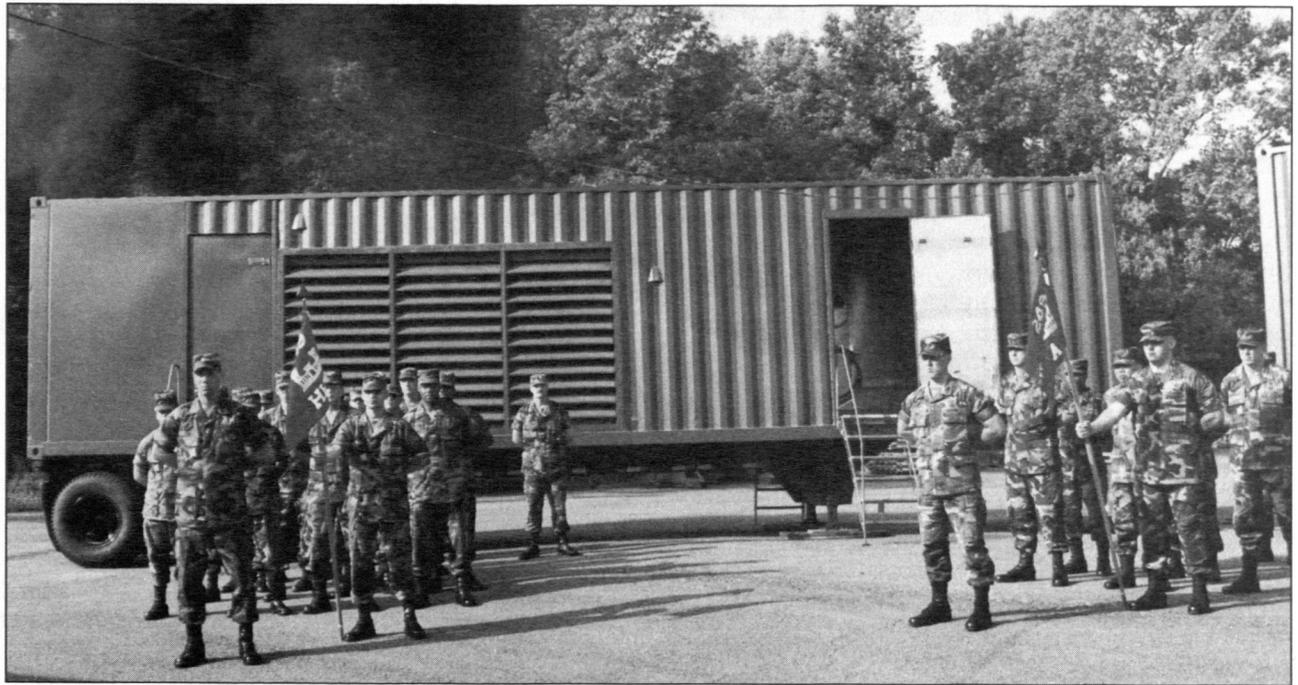
At first, it appeared to Hunter that the only option was to turn the equipment in to the Defense Reutilization Marketing Office. "They would have realized \$300,000 at the most, for equipment that originally cost almost \$2.2 million," Hunter said. "What's more, that money would have gone to the U.S. Treasury general fund. It would have been a total loss to the Center for Public Works Prime Power Program."

Instead, Hunter looked into the potential for trade-in.

"I found that federal regulations allow an organization to trade in old equipment as part of the price for new replacements, the same as you trade in your old car to help pay for a new one. But in this case, we had no money to purchase new equipment, so we looked to see whether we could make a trade that would be beneficial to us and the government."

In fact, this approach recaptured more than half the original cost of the generating equipment for the Prime Power Program, and future savings for the Army that could turn the trade into an actual profit-maker.

"I would advise any organization that is going to dispose of excess property to think twice about it," Hunter said. "It could be that what you think is 'junk' still has some significant value."



Several Prime Power soldiers line up in front of one of three new self contained generators the Prime Power Program got by trading in out dated equipment.

The Center for Public Works placed a note in the *Commerce Business Daily* offering to trade the 13 power plants for new equipment. "Twenty-three companies expressed interest," Hunter said. "At that point we knew we had something worthwhile to offer. It turned out that the companies were interested in the old generators as good sources of spare parts."

Hunter worked with the Baltimore Area Contracting Office to write a contract specifying the terms of the trade. Wheeler Power Systems, a representative of Caterpillar, Inc., presented the Prime Power Loan Program with three new generators in return for the old equipment.

"These generators are equipped with state-of-the-art electronic controls," Hunter said. "They also meet all current EPA emissions standards."

The self-contained generators can be trans-

ported on the highway without special permits. "The old ones required several trailers to move them," Hunter said.

The units represent 4.5 megawatts of power generating capacity. Their first assignment? "We will install two units at the Pentagon to supply back-up power for the Pentagon renovation project.

The third will be available through the Prime Power Loan Program for emergency deployments and peak shaving projects.

"Helping Army installations reduce their electric bills is a major activity of the Prime Power Loan Program," Hunter said. "For example, in 1995 we helped Fort Lee, Va., save more than \$500,000 and Fort Bliss, Texas, save more than \$900,000 through peak shaving projects. This equipment will literally generate savings for the Army."

New chief

Continued from Page 1

Army Europe; Commander, 18th Engineer Brigade in Karlsruhe, Germany; Chief, Assignments Branch, Colonels' Division, DA PERSCOM; and Commander, 82nd Engineer Battalion, 7th Engineer Brigade in Bamberg, Germany.

In addition to numerous other assignments, Lt. Gen. Ballard served two tours in Vietnam where he served as platoon leader in the 84th Engineer Battalion, and later, after attending the Engineer Officer Advanced Course, he served as Commander Company C, 864th Engineer Battalion and then Chief, Lines of Communications Section Operations, 18th Engineer Brigade.

Lt. Gen. Ballard's awards and decorations include the Distinguished Service Medal, Legion of Merit (four awards), Bronze Star Medal (two awards), Defense Meritorious Service Medal, Meritorious Service Medal (three awards), Army Commendation Medal (two awards), and the Army Staff Identification Badge.

He is married to the former Tessie LaRose of New Orleans, La., and they are the parents of three daughters: Mrs. Dawn Stewart, Mrs. Taras Copeland, and Mrs. Makyba Frazer.

Corps helps team return to diamond

Article by Vincent Elias
New York District

Thanks to New York District, a college in New Jersey has new, safe athletic facilities.

On Aug. 21, a formal dedication and ribbon-cutting ceremony at Middlesex County College marked the official opening of the baseball field and tennis courts at the college's new athletic facilities.

But the dedication could not have taken place without an environmental remediation project managed by the district.

The baseball field was built in an area where the former Raritan Arsenal conducted open burning operations. During the preliminary remedial investigations, high levels of lead were discovered in the soil under the ball field, and a decision was made to discontinue its use.

The field had not been used for two years when, in August 1993, the New Jersey Sports Exhibition Authority donated \$852,636.05 to the college to replace the ball field and improve the adjacent athletic facilities. But the grant contained two stipulations. The area had to be cleaned up before improvements, and the funds had to be used within two years.

Project personnel beat the deadline. The investigation, remedial action plan and construction contract were accomplished in just 11 months.

Work began in September 1994 and, during the following eight months, about 17,500 cubic yards of contaminated soil and debris were excavated from the ball field area.

According to Dave Brouwer, project manager, "The project served as a possible template for future defense environmental restoration undertakings of this nature.

"The team that we have at the former Raritan Arsenal is a highly-trained professional cadre that earned the public's confidence," said Brouwer. "The project, however, would not have been successfully completed without the full cooperation of the college, and state and federal regulators."

The Corps, Middlesex County, and college activity fees provided the remainder of the \$1,220,654 total cost.

In spring of 1995, 20 months after it began the second phase of its remedial investigation, the Corps completed cleaning the former burn pit. In October 1995, the college completed developing new athletic facilities in the area that had been cleaned up.

Col. Gary Thomas, New York district engineer, participated in the dedication and ribbon-cutting ceremony. Dr. John Bakum, college president, presided over the event, and Robert E. Mulcahy III, president of the New Jersey Sports Exposition Authority, was keynote speaker.

New Sacramento DE downplays being first

Article by Jason Fanselau
Photos by Ray Hays
Sacramento District

She arrives as the sun rises over Sacramento. Staff chiefs and other district personnel frequently receive messages from her sent between midnight and three in the morning. She knows the names of the janitors who cleans the building long after most employees have returned home and are eating dinner.

Since Col. Dorothy Klasse took command of Sacramento District on Aug. 1, she has earned the respect of her staff, been promoted to full colonel on Sept. 1, and received the key to the city of Sacramento from the mayor.

And incidently (because she prefers it that way), Klasse is the first woman to command a Corps district.

Being the first woman district engineer is a distinction Klasse would prefer nobody noticed. She would rather just do her job and let her peers judge her accomplishments. But she also accepts that it's a distinction she cannot escape.

When asked about being the first woman DE, Klasse closed her eyes and thought a moment. "It validates my decision to make the Army a career," she said slowly but forcefully.

"The Army and the Corps have given me the opportunity to faithfully serve the nation and the people. Many DEs have come and gone before me and, like them, I will do the best job I possibly can," Klasse said.

Growing up on a farm in Wisconsin and working in high-level offices

in the Pentagon have given Klasse a down-to-earth, let's-work-together, give-it-to-me-straight leadership style.

She often leaves her desk without telling anyone, walks down the hall into a division or branch office just to talk to her employees and see how things are going in the trenches.

"I enjoy going around and talking to my people, instead of getting reports on them," said Klasse.

Klasse has held a variety of command and staff assignments, including military assistant to the Assistant Secretary of the Army (Civil Works) and assistant executive officer to the Chief of Staff of the Army. The Pentagon is a place she's familiar with, and she sees no conflict between that and working at a district.

"Policy formulation is an intricate and delicate process," Klasse said. "Having had the opportunity to observe first-hand, and participate to varying degrees in that process, will be of great benefit to my work here in the district. I don't have to tell you where issues originate because you already know. They originate here, 'where the rubber meets the road.' Now, I'll be involved in the issues from the ground-up as opposed to from the top-down.

"Working at either level requires you to deal with complex issues. Flexibility, technical competence, sensitivity, partnering and cooperation all come to mind as qualities necessary for successful resolution of the many issues we face," she said.

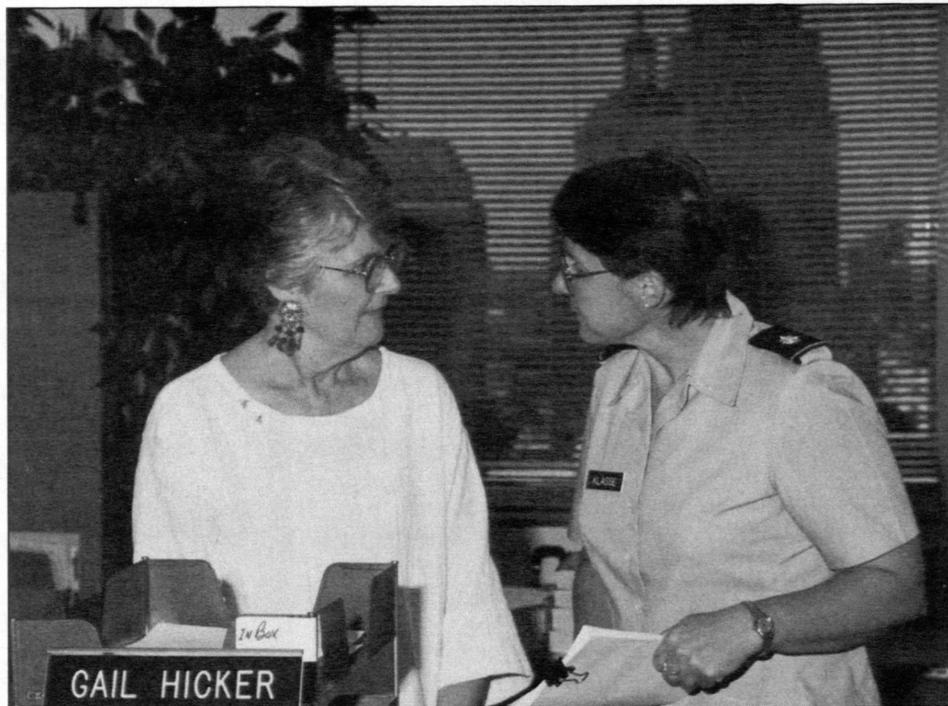
Being "where the rubber meets the road" is a familiar place for Klasse. She commanded a combat heavy engineer battalion at Fort Stewart, Ga., which had both vertical and horizontal construction capabilities.

During her command the battalion deployed to Homestead, Fla., where they provided humanitarian assistance to communities hit by Hurricane Andrew.

And pinned to her dress uniform are Airborne (paratrooper) and Air Assault (attack by helicopter) badges, emblems which command instant respect among soldiers.

"I always felt that you should not ask your soldiers to do something that you cannot do yourself, within reason," said Klasse. "Therefore, I thought it was important for me, as a young lieutenant platoon leader and as a company commander, to have experienced and completed some of the same training that my soldiers had undertaken."

Klasse said her desire to serve in the military dates back to her childhood. "I always wanted to be a soldier. I know it sounds corny, but it's the truth. I'm not unlike any of the people in the Corps. We all serve our nation in different ways; I just



Col. Klasse talks with Gail Hicker of the Office of Counsel during one of her walking tours of the district headquarters.

wear a uniform."

Klasse earned a bachelor of science degree in biology and geography at the University of Wisconsin at Eau Claire. She went on to the University of Hawaii at Manoa and earned a masters degree in geography.

"I've always had an interest in nature and the environment," Klasse said. "I studied those particular disciplines because they allowed me to spend time outdoors. I even spent part of my college summers working for the Department of Natural Resources in Wisconsin, which allowed me to work outdoors. My summer jobs let me conduct field studies in mapping, both biologically and zoologically, portions of the St. Croix River."

Being a geographer rather than an engineer could be viewed negatively by some. Klasse doesn't see a problem.

"The DE has an awesome responsibility to lead a team capable of executing our mission — not only for today, but to position the organization for tomorrow, so that we can continue to be the 'people's engineer.' That requires both leadership and management skills.

"I believe my past assignments have prepared me well to assume this strategic leadership role. I'm confident that the people of Sacramento District will make an exciting, dynamic and successful team, leading the district into the future," Klasse said.

Shortly after arriving in the district, Klasse had a transition conference with her senior staff where they developed the vision statement "Performance Keeps Customers Coming Back" to capture the district's spirit.

"I want to show our customers that we are the best at what we do, and not just once or twice a year, but in every contact we have with our customers," said Klasse.

In her previous assignments working for the ASA(CW) and the Chief of Staff of the Army, Klasse observed the Corps as an outsider.

"The Corps has a great reputation," said Klasse. "I witnessed that first-hand while working in the Pentagon during two different assignments.

"One area where I believe we can all be more proactive is telling the Corps' story. We are leaders in managing, protecting and restoring the nation's water resources, and we provide quality engineering services.

"I could go on but, my point is, we don't do enough to spread that story. We need to make sure the public knows what the Corps' capabilities are. We are one of the nation's problem-solvers, and people need to know that," she said.

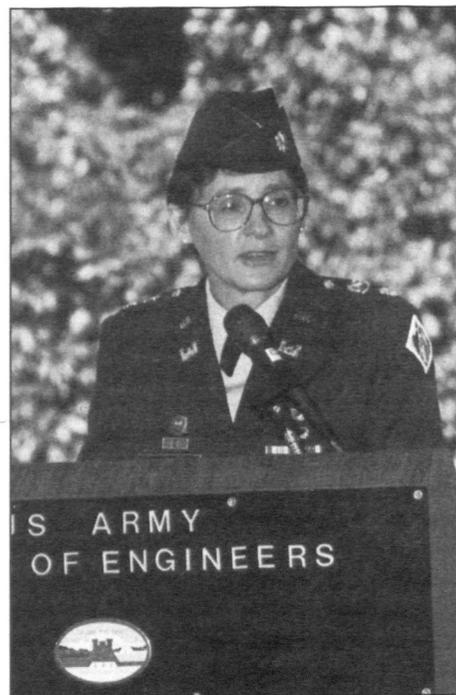
When asked for her role-model in leadership, Klasse said, "there are many people I admire, but one who comes to mind is Golda Meir. She was prime minister of Israel from 1969 to 1974, and she had many qualities I admire in a strategic leader.

"She had tremendous consensus-building skills; she was never outvoted on any major issues, let alone minor ones. She was persuasive but temperate in most of her positions and arguments.

"Another quality I admired was that she wasn't afraid to publicly admit to making a bad mistake," Klasse said. "She always accepted full responsibility, never transferring blame or pointing fingers. I like that quality in a leader."

The little time Klasse spends outside of the office is spent on relaxation. Anything involving outdoor activities is fair game for Klasse. "One day I'd like to hike the Appalachian Trail. I enjoy racquetball, skiing, boating, reading — especially Civil War history. Any outdoor activity makes me happy."

Klasse is looking forward to her assignment as a district engineer. "It's a once-in-a-lifetime opportunity. This is going to be an exciting two years of my life. I'm surrounded by professionals who believe in a team effort."



Col. Dorothy Klasse addresses the audience during the August 1 change of command ceremony at the Sacramento District.

NPR 'Hammers' Little Rock three times

By Jennifer Patrick
Little Rock District

It's good to be recognized by others when you go the extra mile to help people, put customers first or find new and better ways to work.

When that recognition comes from Vice President Al Gore's office, it is even better. When that recognition comes three times, it is a record for the Corps of Engineers.

Little Rock District (LRD) officials were notified this summer that the district had received three Hammer Awards for new navigation business practices. The stoplog bulkhead repair team, the lock dewatering team and the hydrographic surveying team received the awards.

The Hammer Award from Gore's office recognizes teams in the federal government. The teams must demonstrate significant contributions in support of the National Performance Review principles of putting customers first, cutting red tape, empowering employees and getting back to basics. The award is a framed carpenter's hammer, a humorous reference to the infamous "\$400 hammer."

"This is the first time since the awards were established in 1992 for a Corps of Engineers district to receive three," said Judy Greenwood, Total Army Quality (TAQ) program manager for LRD.

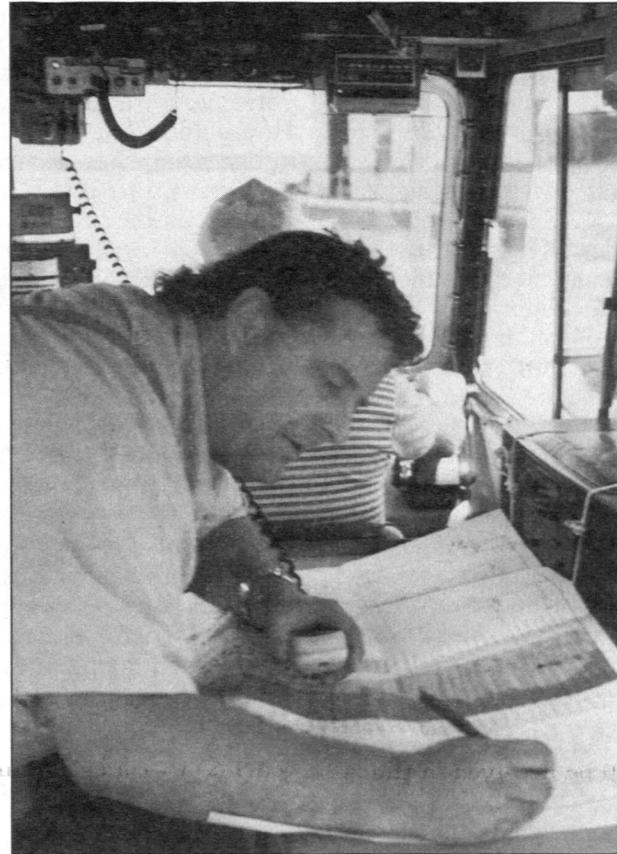
Each team had to demonstrate that it made an extraordinary effort to change some aspect of what the members do, and that these actions contributed to making the federal government work better and cost less.

Stoplog team

Inspections of stoplogs used for the annual lock dewatering showed that 85-to-90 percent of the welds did not meet minimum safety standards. The stoplog bulkhead repair team set up an inspection, evaluation and repair procedure for all the stoplogs and bulkheads used in the district to dewater locks and tainter gate bays. (Dewatering

means to empty all the water from a lock for maintenance operations).

"This was a time-sensitive project," said team leader Lee Bass. "These stoplogs are used to do maintenance on the locks and dams. Without them, we wouldn't only be unable to dewater the locks, we also couldn't address an emergency. We had to get these deficiencies corrected in case



Ron Harrison marks coordinates during a survey of the Arkansas River. He is using color-coded survey maps produced with the GPS. (Photo by Jennifer Patrick)

something went wrong."

Instead of contracting out the job, the team used marine terminal workers and temporary welders to get the job done quickly and efficiently. This saved about \$500,000 and protected the navigation system from potential shutdowns.

Lock dewatering team

The lock dewatering team helped improve the district's level of service for navigation customers by decreasing the time it takes to dewater a lock. The industry average for lock dewaterings is 21 days. LRD's average was 14 days.

By organizing a team of managers and maintenance workers to study the process, the team reduced the time needed to dewater and inspect a lock to 10 days. This improvement reduces the amount of downtime on the navigation system and increases the level of safety because more routine maintenance is performed.

Hydrographic survey team

The hydrographic survey team uses state-of-the-art global positioning satellite equipment to reduce the time it takes to survey the river channel and increase the survey accuracy. Using the new computer equipment, the team can now survey a typical 10-mile stretch of river channel in three hours. Without the equipment, it would take one week to complete the job.

"When the new equipment came on line, it took the place of three men on the survey crew," said Freddy Wright, chief of Pine Bluff Contracts Support Section. "It tripled our production, and we went from four-man crews to one surveyor and a boat operator."

The new surveys are super-accurate and cost-effective. A savings of \$43,320 was noticed in the first year of implementation. A savings of \$106,320 is predicted for every year thereafter.

Savannah leaps into future with new system

By Verdelle Lambert
Savannah District

While others contend with multiple pieces of equipment to analyze hydropower relays, Savannah District has leaped into the future with a complete three-phase relay diagnostic system in one portable package.

The Multi-Amp® Pulsar® Universal Protective Relay Test System is state-of-the-art, has modules built to district specifications, and is the only system of its kind in South Atlantic Division.

"This is the future," said Joe Burden, electrical engineer-technician, and the person most responsible for the district getting the new relay test system. "As our old electrical/mechanical relays fail and new solid state or microprocessor-based relays are installed, we won't have to run out and buy another piece of test equipment, because we're already there!"

"One of Hydropower Section's responsibilities is evaluating generators, transformers and breakers, and calibrating relays and meters, ensuring they function properly," said Virgil Hobbs, chief of the Hydropower Section. "This particular program not only serves Savannah District projects but Wilmington and Charleston districts as well, so it covers a total of six powerplants and one pumping plant."

Burden, who works in the Hydropower Section of Operations Division, said that when he began relay testing in 1984, it took two tables of equipment to do what the new computerized system does.

"I'd have so many different loads to control I'd have to use both hands and have someone else turn something just to keep a steady rate of current, voltage, frequency, and phasing in order to perform a test," he said. "With this system, I just tell the computer what I want the current or voltage to be, and it's there all the time — no variance."

Relays are devices used in powerplants to monitor voltage, current, and fault conditions on generators, transformers, and transmission lines. When relays sense danger to the system, they shut down (i.e., open a breaker to) that section to prevent equipment damage, which would result in lost revenue and costly repairs.

Burden and Jim Harbin, Operations' other electrical engineer-technician, began testing relays with the new system last October at Hartwell Lake and Dam on the Savannah River, creating test routines (programs) that are stored for future testing. With the development of each test program, data logging, report generation, and database storage and retrieval are added to provide instant analytical capabilities for the technician.

Burden estimates it will take about three years

to create programs and databases for the three district powerplants they service.

"Once a program is developed, it can be used at other locations for similar relay testing," said Burden. "Hopefully, we will find other districts to interface with on developing programs and supporting each other with new ideas."

The new system offers several advantages.

Repeatability: Because the new system is computerized, it tests the same way every time. This provides the accuracy needed to test relays with higher sensitivity and accuracy requirements.

Trending: Because the computerized system can use various support tasks, the user can develop databases for the relays and establish trends for how they function during a period of time.

Simulation: Once the powerplants are equipped with solid state or microprocessor relays, Burden and Harbin will be able to simulate fault conditions on the equipment to make sure a relay works properly, or find out why it didn't work properly.

"We take a lot of pride in protecting our equipment, making sure our relays operate in a fault condition before something catastrophic happens," said Burden. "This is my bread and butter. I love relay testing and instrumentation, so it's a challenge to make all the programs work."

Various backgrounds, talents keep ASA(CW) office functioning well

Article by Carol Sanders
Photos by F.T. Eyre
HQUSACE

How does the Assistant Secretary of the Army (Civil Works) keep it all straight? One hour H. Martin Lancaster is at a budget briefing, the next meeting a local official, then a Congressman. He sets strategic goals for Corps civil works, and still has time for the National Student Leadership Forum. How does he do it?

The answer is his staff. They juggle the calendar, put the most pressing issue on top of the list, gather background and recommend action. Lancaster's staff is less than 20 people, but they have extensive district, division and headquarters experience, plus time in the Office of Management and Budget (OMB) and Congress.

In the June *Engineer Update*, Lancaster said, "The ASA(CW) is a political appointee who articulates the Corps' civil works policy, then advocates that policy before Congress. The ASA(CW) works with the Administration in establishing budgetary and policy initiatives for the Corps."

Sounds simple, but behind the scenes at the ASA(CW)'s office, telephones ring, fax machines churn out paper and people rush about. It takes calendar-juggling just to talk to them about their role in the ASA(CW)'s success.

Principal deputy

Dr. John Zirschky is the Principal Deputy ASA(CW). He has experience in the private sector and Senate, and was acting ASA(CW) until

Lancaster's appointment. Zirschky plays a key role in developing the Corps' strategic vision and implementation plan, a process he began several years ago by developing the Roles Matrix which laid out responsibilities for each level of the Corps.

Zirschky also reorganized and streamlined the ASA(CW)'s office. "The rest of the government was downsizing, the Corps needed to downsize, and we couldn't ask them to do something we weren't willing to do."

He noted that one of the biggest challenges of the ASA(CW)'s office is making hard decisions. "While the districts are responsible for looking at what's good for them, here in this office we have to look at what's good for the Corps. Sometimes that means hard decisions that don't pay off until years later."

Zirschky and Lancaster rely heavily on their secretary, Damaris Falero-Kendall. She has been with the ASA(CW)'s office since last November and juggles the phones, letters, dictation and calendars for both Lancaster and Zirschky. She has worked in Washington 13 years.

Policy and Legislation Group

For Corps civil works policy and legislation issues, Lancaster relies on the Policy and Legislative Group (PLG). The PLG, led by Deputy Assistant Secretary Michael Davis, provides executive policy direction to the Corps for its water resources, regulatory and environmental restoration programs. The PLG staff (Davis, Jim Smyth, Kevin Cook, Chip Smith and Barbara Cas-

sady) handles a heavy, challenging workload.

"Things move fast in the ASA(CW)'s office and it's rare that we deal with an easy issue," Davis said. "The folks in HQUSACE and in the field resolve most problems, so by the time an issue gets to us it's usually a big problem or involves a new policy area. Most people would be surprised by the day-to-day involvement we have with the White House and Congress."

The group has several initiatives underway, including an effort with the Corps to improve the General Investigative Program, and to increase the Support for Others Program. In addition, Davis chairs the strategic plan task force which is developing the Civil Works Strategic Plan for Lancaster.

Davis has 18 years in the Corps, including nine with Nashville District. He has also worked in the White House and the Environmental Protection Agency. Davis describes himself as a big fan of the Corps who is pragmatic and balanced in his approach to federal programs, with strong feelings about what the federal government and the Corps should do to protect and restore the environment.

A biologist, Davis is intimately involved with the Corps' regulatory program and plays a major role in national wetlands policy. He chairs the White House Wetlands Working Group.

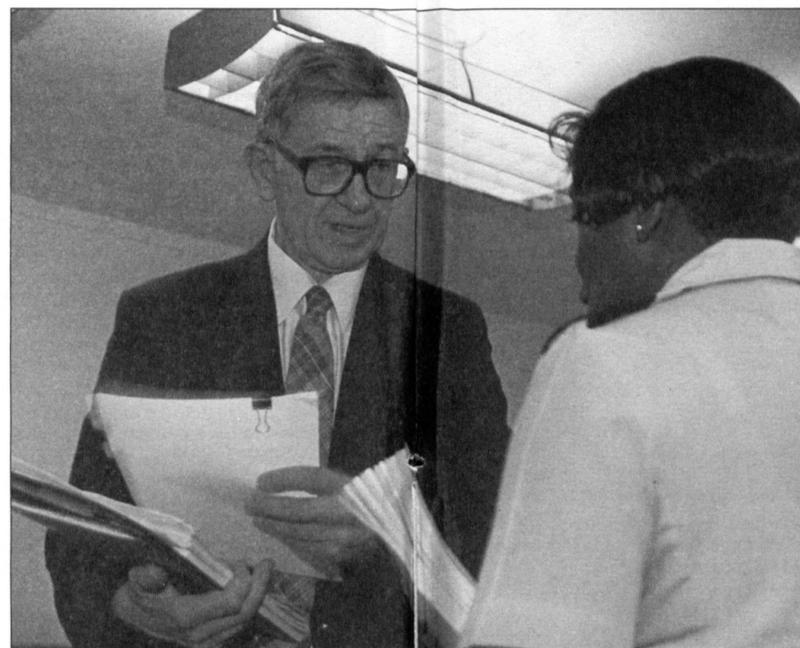
Davis and others in the office discussed improving communication with the field. "It's not that people don't want to communicate, but the velocity of things we work on sometimes doesn't allow us to touch all bases," Davis said. "We need to talk more and do a better job of communicating policy decision to the Corps."

"I'm concerned, as are others, about the artificial distinction between the Army and the Corps," Davis said. "We're all part of one Army team and by working together we can make a difference. I'm proud of what we do."

Jim Smyth has worked for the ASA(CW) since November 1990. His principal job is everything requiring an Army decision on the non-environmental aspects of all projects.

Smyth's 14 years in Corps districts and 10 years at the Board of Engineers for Rivers and Harbors, plus training as an engineer, help him handle policy decisions. "The challenge is to get in front of policy formulation," Smyth said. "If the issue is in a letter or a report, then it's already a problem. We'd like to head those off."

Smyth enjoyed his years with the Corps. "I was always impressed with the broad organization and the



Deputy Assistant Secretary for Management and Budget Steve Dola (left) discusses correspondence with Sgt. Minnie Burton of the Executive and Administrative Group.

sense of responsibility and willingness to look at what we did."

Kevin Cook oversees the Corps' international activities, support to U.S. agencies, and a variety of inter-agency initiatives on environmental resources. Cook has been in the ASA(CW)'s office since 1991, and spent 15 years in Corps districts, divisions and headquarters.

Cook said that "assumptions that worked for us 50 years ago no longer hold true. We need to adapt, rather than waiting for the world to adapt to us."

Chip Smith is the newest member of the PLG. He came to the ASA(CW)'s office after six years in headquarters reviewing reports for environmental compliance and eight years in Rock Island District. Smith is primarily responsible for civil works environmental policy and the Corps' regulatory program.

Smith's biggest challenge is to expand the thinking and interpretation of laws and regulations on environmental restoration and protection. "I'd like to push the envelope on the environmental mission. I have great confidence in the Corps' ability to adapt to the future."

In discussing communication between the Corps and the ASA(CW), Smith said, "Everyone's open to hearing what Corps people have to say. We want to hear options."

The group's secretary is Barbara Cassidy. She has worked for the ASA(CW)'s office since 1988. She says she's always been fascinated with politics and enjoys helping prepare Congressional correspondence.

Management and Budget Group

When Lancaster meets with members of Congress or the OMB, the Management and Budget Group has prepared him. Steve Dola, Deputy Assistant Secretary (Management and Budget Group), heads the group, which is responsible for developing, defending and executing the civil works budget. Dola also heads the ASA(CW)'s effort to improve the current performance measurement system.

The group members are Bob Kaighn, Claudia Tornblom and secretary Renea Coston. They are working with the Corps and Lancaster to formulate the FY98 budget, and working with OMB and the Corps to review the FY97 civil works appropriations.

In working on the FY97 program, they are examining the Energy and Water Development Appropriations Bills passed by the House and Senate, comparing them with the President's budget, and advising OMB on what the Administration's position should be during the conference on this bill. In addition, they are resolving issues in the current year program execution.

"We work closely with headquarters in formulating the upcoming budget and developing the Administration's position," Dola said. "There's a real sense of sharing."

He pointed out they also get involved with resource allocation issues — for example, flood control versus navigation, or construction versus operations and maintenance.

"Annual resources available to the civil works program are limited, which means hard choices," Dole said. "Such decision-making requires a broad perspective to allow the full range of options to be considered."

Dola began work in Washington at the Bureau of the Budget in 1966. He soon moved to the Army and has worked in the section that had Corps civil works oversight.

He said the most fascinating challenge of his time working with the Corps was dealing with the aftermath of the Mount St. Helens eruption.

"It raised all the issues one would find in an entire career," Dola said. "On a day-to-day basis we had to bridge the gap between technical issues and policy issues. We were involved daily in laying out the technical information and policy issues so the decision-makers could analyze the implications. I've never been more proud of the way the Corps works than during that time."

Bob Kaighn deals with operations and maintenance — recreation fees, real estate, and project operations are on his daily list. Before Lancaster approves a project cooperation or water supply agreement, Kaighn ensures that it is ready for signature, including coordination with Army General Counsel. Kaighn's background is in civil engineering and planning, with 10 years in Philadelphia District and 10 years in policy and planning at HQUSACE.

Kaighn said the biggest challenge is "finding some reasonable way to reduce the cost of the current operation and maintenance program so we can build new projects in the current budget climate."

Claudia Tornblom's principal job is developing and implementing the budget. She works closely with headquarters daily to make sure that both the Corps' views and Army policies are represented.

"It's challenging when we have a pending authorization bill, a pending appropriations bill, and we're trying to put together next year's budget all at the same time," Tornblom said. "Communicating with the PLG becomes a challenge, but we're getting better at it."

Tornblom has been with the ASA(CW) since 1987. Eight years of experience with OMB made her especially qualified for coordinating with OMB and preparing the ASA(CW) for testimony on the budget.

Renea Coston is the group's secretary, which can sometimes be a challenge since the group has offices in the Pulaski Building and the Pentagon.

Executive and Administration Group

A key element in any efficient operation is administration. Col. Bob

Sperberg, who commanded Wilmington District until recently, is the executive officer for the ASA's office. "We ensure that we provide good customer service and that the hundreds of staff actions that go through the office are responded to promptly."

Sperberg believes his recent experience as a district commander will give the entire staff a reality check with the field. He said that the biggest challenge is "continuing to provide services and meet expectations with a reduction in staff and budget."

Since June, Lt. Col. Michael Duffy has been Lancaster's military assistant and coordinates all of Lancaster's meetings, briefings and trips. Before that, Duffy was deputy district engineer in Rock Island District and has worked in New York District as well.

Duffy approaches his job from the customer's viewpoint. "There are many stakeholders, customers, and Corps members who want time with the assistant secretary, but his time is finite. Mr. Lancaster has an ambitious schedule. I want all people to perceive they're being treated as customers. That goes for the person requesting the meeting as well as the person receiving the briefing."

Duffy also speaks highly of the Corps. "There's no organization I hold in higher esteem than the Corps of Engineers, nor any profession I hold with higher regard than engineering. I don't want to diminish our many skills, but our fundamental strength is engineering."

Ruth Huff has been the adminis-

trative officer since January 1995. She says her biggest challenges are keeping information flowing and computers running.

Carolyn Contreas-Cuzman is the team's support services specialist and loves troubleshooting. "I get a great deal of satisfaction from repairing things, whether it's the copy machine or a computer program. I have a wide range of experience, and I know what instructions to give to get results." She says her major challenge is to keep the office safe and secure.

Valerie Lewis, the group secretary, said she "enjoys learning about the many facets of the Corps" and particularly remembers the days after Mount St. Helens.

Staff Sgt. George Faulk has been in the Army for 16 years and has served all over the world. He said he enjoys designing graphics for presentations and escorting visitors. "You meet a lot of interesting people," he said, naming some senators and ambassadors he's escorted.

Sgt. Minnie Burton, also on the administrative staff, has been in the Army for nine years and has served at Fort Lee, Va., and in Belgium. She says she is "dedicated to the mission and enjoys working under pressure."

So that's how Lancaster does it. Whether there is a dignitary to be escorted, a letter to be typed, an issue to be briefed on, or a meeting to be set up, his staff knows what needs to be done first. The secret to keeping all of the balls in the air is a proficient, organized staff who keeps priorities straight and customers happy.



Kevin Cook (seated), Policy and Legislative Group, confers with Bob Kaighn of the Management and Budget Group.



Chip Smith (left), Policy and Legislation Group, and Deputy Assistant Secretary for Policy and Legislation, Michael Davis, discuss upcoming meeting agendas.

CD bid sets put big savings in small package

By Katherine M. Peters

If you think compact discs are just for music lovers, think again. Since the Corps of Engineers began putting contract bid documents on compact discs with read-only memory devices (CD-ROM) last year, they haven't stopped counting the savings. What began as a simple process to convert paper documents into electronic format has turned into a major money-saver.

Many federal agencies have been using electronic commerce and electronic data interchange (EDI) technology in contracting, but the Corps faced unique challenges. The documents which solicit bids for a typical Corps construction contract include several volumes of contract documents and specifications, and as many as 250 detailed drawings.

There's no practical way to distribute all of this using EDI.

The documents and drawings that comprise the "bid set" are originally produced electronically, but the Corps converts them to paper to solicit bids from contractors.

The text documents and the drawings, which are produced on 30-by-40-inch paper, cost anywhere from \$400 to \$700 to produce per set, and another \$16 or so to mail. It can add up to a stack of paperwork a foot tall weighing about 10 pounds per set.

"We transfer those (paper documents) to each and every contractor that wants to bid on a project," said J. Justin Taylor, program manager for the Electronic Bid Set (EBS) Project at HQUSACE. "We can now take the same amount of documentation and put it on a CD-ROM and mail it out for 55 to 80 cents per CD-ROM."

Benefits

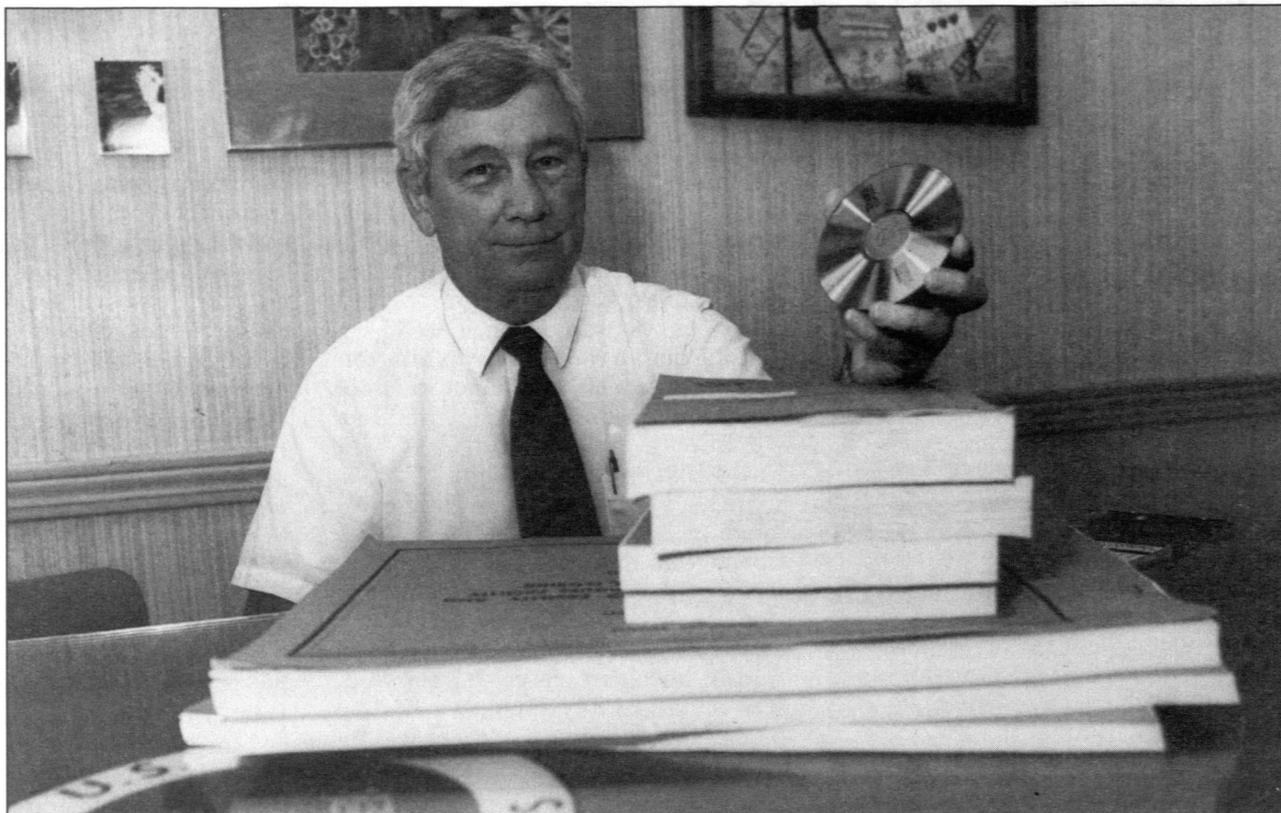
Taylor's EBS working group spent the past two years developing the electronic bid sets. Among the benefits of the technology:

- The Corps estimates it will save 75 percent on reproduction costs per solicitation.
- Contractors no longer have to scan the paper documents for use with their computer aided design and drafting machines.
- Document integrity is maintained by the "read only" format of the CD.
- Search and print capabilities enable contractors to use the documents more efficiently and cost-effectively.

"Overwhelmingly, the feedback has been good," Taylor said. Of 65 contractors consulted by the Corps before the first pilot project was launched, only three voiced concerns about the process (one did not have a computer).

Projects

Fort Worth District was selected to place the first job on CD-ROM. The Air Force Material Command selected the dormitory complex at Edwards Air Force Base, Calif., to be issued using electronic media. With guidance from the HQUSACE team, a team of Fort Worth District employees successfully advertised the Edwards complex on April 26. Of the 133 contractors who requested a set of plans and specifications, five bids were received by Los Angeles District, where the project was transferred. The project was



Benny Anderson, chief of Design and Review Section in Mobile District, displays the obvious "bulk" savings of CD-ROM over paper for distributing plans and specifications. The CD-ROM bid sets also will save hundreds of dollars in reproduction costs. (Photo by Adrien Lamarre, Mobile District)

awarded on June 28.

This pilot project saved about \$20,000 in document reproduction and mailing costs. Five more pilot projects are in the works. Three are Corps projects and two are Navy projects.

Four other projects are currently being advertised electronically.

Equipment

The Corps has tried to make the new electronic bid sets more convenient for contractors to use, said Taylor. The vast majority of contractors already have the equipment necessary to use these electronic documents.

Ideally, contractors should have a personal computer with CD-ROM drive, Windows 3.1, Windows NT or Windows 95 software, 486/33Mhz with 16 MB RAM or better, and a Super VGA monitor with 800x600 resolution. The *minimum* hardware requirement is 386/40Mhz with 8MB RAM and a VGA monitor with 640x480 resolution. Drawings can be printed with a laser printer.

Transition

The transition to electronic bid sets needs to be gradual, said Taylor. In addition to distributing bid sets on CD-ROM, the Corps also provides the capability to view and download documentation electronically through the Internet.

"When we started out, we were just converting paper documents to electronic documents," said Taylor. "But after looking at the technology and looking into what the capabilities are, we decided we could do a lot more. We can now make them available on the Internet, where we have a wider audience."

Corps officials anticipate eventually making bid sets available Corps-wide through the Internet after the pilot projects are completed, which probably will be a year or longer.

Until document integrity can be maintained on the Internet, contractors will still be required to obtain a copy of the bid set on CD-ROM. "At some point, we're looking at going totally to the Internet, but maintaining document integrity will have to be solved first," said Jean McGinn, an architect in the Engineering Management Branch at

HQUSACE.

Distributing bid sets through the Internet will result in a wider dissemination of information and increase competitiveness, Corps officials believe. Currently, projects for which the Corps seeks bids are announced in *Commerce Business Daily*. Interested contractors order bid sets over the phone or by walking into a Corps office where bid documents are distributed.

The future is here

In the future, announcements will go out on the Internet as well as in *Commerce Business Daily*, and documents can be viewed or ordered from the Internet.

Using a Web browser, contractors are able to query a database of advertised contracts. Each advertisement is linked to a Web site where contractors can view contract descriptions, specifications and drawings. From the Web site, a contractor is able to both order the CD-ROM and download associated files.

PDF and CALS

To encourage contractors to move toward electronic bid sets, the Corps determined that contractors should be able to view, search and reproduce documentation without purchasing a special viewing software, and the reproduction of drawings should require little technical expertise when printing or plotting.

Because of the need for text and graphics standards, the Corps selected the most popular file formats — portable document format (PDF) for text and CALS for graphics. CALS refers to the Department of Defense standard for raster graphic images.

PDF is a neutral file format currently used by many within the computer industry as a standard for distributing electronic text documents.

Engineering drawings will be distributed in CALS format. As viewer technology develops, other formats may be included on the CD-ROM.

(This article is reprinted from the September 1996 issue of "Government Executive," with additions by Bernard Tate at HQUSACE, Tim Dugan in Mobile District and Denver Heath in Fort Worth District.)

District volunteers brush up Nebraska

Article and Photos
By Maggie Oldham
Omaha District

A usually tranquil neighborhood south of Hanscom Park in Omaha was stirred by a buzz of activity early one Saturday in August as an industrious bunch of Corps employees and family members put the finishing touches on a painting project of house-size proportions.

"They can't be that close to done already, are they?" asked homeowner Eugene Korlaski as he watched a crew of Omaha area Corps employees clean their paint brushes after only three hours on the job.

Korlaski, 67, painted the house himself eight years ago. Even with a sprayer, the job took him three months as his trips up and down the ladder took their toll. "I'd get to the top and I'd have to come down and rest," he said. "But, then I got used to it. About five minutes was all I could last up there."

Korlaski carries a heavier burden. The Korean War veteran is a double amputee and is fitted with artificial legs. He's also a veteran of three open-heart surgeries and 35 operations during the past 17 years.

This year he got some help from 60 employees of Omaha District and Missouri River Division, and their spouses, children, and friends. For the past several years, Corps employees in Omaha have joined corporate sponsors to make Brush-Up Nebraska an annual event.

Brush-Up Nebraska is a volunteer project to paint the homes of low-income elderly and disabled people. Since the event started in 1989,

more than 900 homes in the Omaha area have been painted and the program has spread to neighboring states, says organizer Sheila Pettigrew.

"Without the volunteers donating their times and talents there would be no program," Pettigrew said. Volunteers painted 127 homes this year.

The paint is supplied by Diamond Vogel Paints.

Stately trees shade the unassuming, older homes in Korlaski's neighborhood. His 1911-era house took a turn for the worse this spring when hail battered his roof, which was already patched with five old layers.

"I had to borrow \$4,500 just for a roof because the insurance didn't pay for it," said Korlaski, who lives alone.

The cost of a new roof and paint peeling from the two-story frame house worried his step-daughter Sandy Jankowski, who wondered how they were going to get the house painted. Then her sister, Stacy Gash, heard about Brush-Up Nebraska and sent in an application for their stepfather.

Volunteers spent a couple of evenings after work priming and scraping. Actual painting was left until Saturday. "They went over and above the paint job," Jankowski said.

From his view on the back porch swing, Korlaski watched as the team also trimmed bushes, cleaned out flowerbeds, swept the sidewalk, weeded, replaced loose porch boards, painted the front swing, and trimmed bushes and yew trees.

"It's just like I got a new house," Korlaski said.



Readiness Program Assistant Mary Tracy and Program Manager Red Harris (background) apply a fresh coat of paint to Eugene Korlaski's home.

The congeniality of the workers also took Korlaski by surprise. "They're a great bunch of guys and gals," he said. "It's just like they've known me all my life."

Linda Burke, a paralegal in the Office of Counsel, brought her 12-year-old son Brian with her. "Everybody said it was a lot of fun, so we

thought we'd come out here and give it a try," she said.

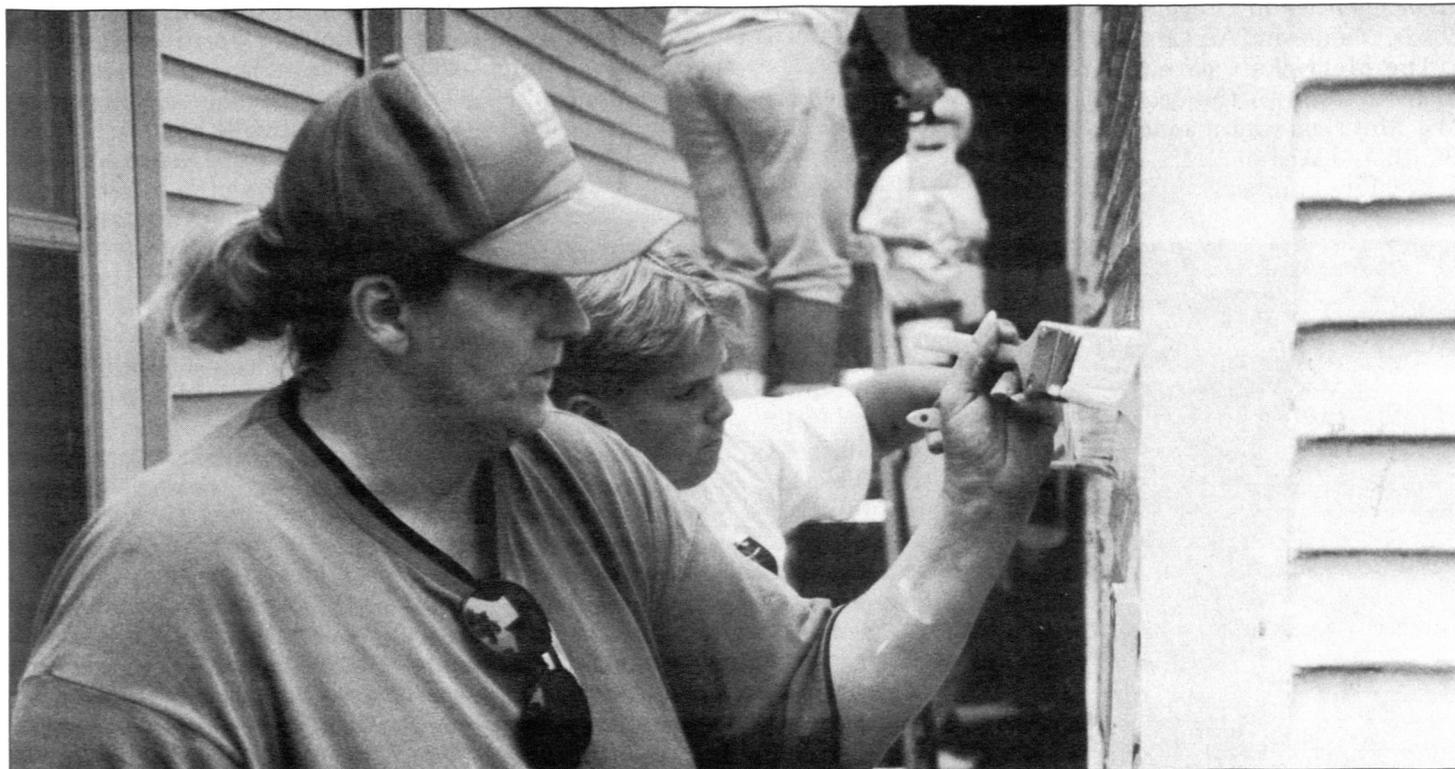
Jeff D'Agosta, who coordinated the event for Corps employees, along with contract specialist Barb Rennert and executive officer Norma Kolbe, said they see people return every year.

"There's people like Norma's husband Bill," said D'Agosta, an attorney for the Office of Counsel. "He does all the carpentry work. You don't have to worry about it because Bill takes care of it."

A handful of red petunias burst from a wooden planter near Korlaski's back door. Dill, basil and herbs were within reach, and a handful of tomatoes ripened nearby. Korlaski waved toward his garden. "I got raspberries there in the middle," he said. "I used to have all of this too, but my daughter says not this year. 'You're not going to do it no more. It's the heat that gets you.'"

What Korlaski hasn't been able to do on the outside, he's done on the inside with woodworking projects to update his home. "That makes it especially rewarding," said D'Agosta. "You know that in seven to eight years the house will still look good. He's going to keep it looking good."

"You can't imagine what this has done for me and for my peace of mind," Jankowski said. "I don't like him having too much stress. We don't have to worry any more."



Joyce Ridout, a clerk with the Missouri River Laboratory, and son Wade, age 12, were part of the team of Omaha Corps employees participating in Brush-Up Nebraska.

Award recognizes Norfolk's avian efforts

By Amy Goebelbecker
Norfolk District

The staff of Norfolk District's Craney Island Dredged Material Area received the Virginia Society of Ornithology Jack M. Abbott Conservation award for 1996 in a recent ceremony at Craney Island's main office.

The award was presented to the staff for "their contributions and assistance in the creation, protection and preservation of critical habitat for beach nesting birds. The management of these nesting areas and protection of these sites have resulted in the increased population of the piping plover and the least tern."

Craney Island Dredged Material Area, a 2,500-acre man-made peninsula in Norfolk Harbor next to Portsmouth, Va., was developed to support the creation and maintenance of navigation channels. The bird protection project became formal in 1984 under a cooperative agreement with the College of William and Mary and the Department of Game and Inland Fisheries.

Guided by Ruth Beck, biology professor at William and Mary, the staff marks off nesting sites to keep contractors, fishermen, employees and bird watchers from entering the nesting areas and injuring the birds or their young.

Area bird watchers and Craney Island staff and retirees attended the small ceremony. Each Craney Island employee received a framed copy of the award.

"It's very nice of them to give us the award. We were doing all we could to preserve the birds," said Hank Williamson, former chief of Craney Island.

Beck nominated the Craney Island staff for the award based on her experience with them since 1974 and their efforts to protect the birds while managing Craney Island as a dredge material receiving area.

"In the case of Craney Island, you have a functional dredged material management area that also provides the biological requirements of avian species that have been attracted to Craney because it simulates natural beach nesting habitat," said Beck. "This kind of relationship can be almost symbiotic. By finding a compromise between the biology of the birds and dredged material management strategies, we can create habitat, promote foraging and let the species nest there successfully, yet still allow the Corps to function."

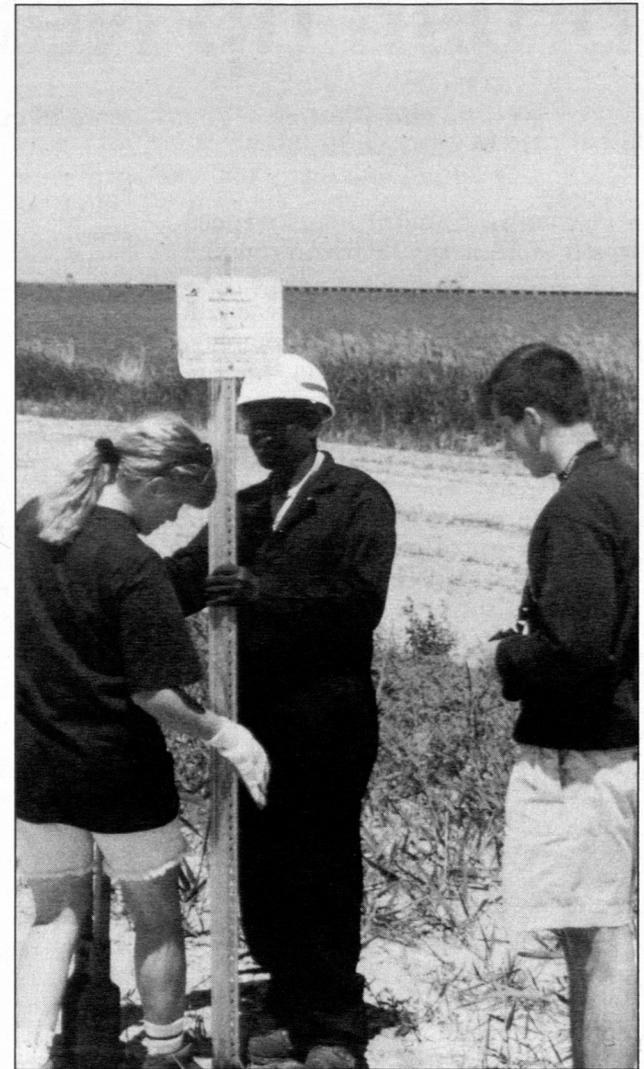
Predicting where the birds will nest is not easy. "It's a very interesting project trying to figure out where the little fellas will go and what they will do," said Bill Rawls, chief of the Craney Island Project Office. "You prepare areas for them and then they nest where they want"

"I enjoyed just watching the birds when they were protecting their nests and laying their eggs," said Ollie White, a former motor vehicle operator who worked at Craney from 1957 to 1993. "They were very protective of their nests. When you would get close, they would attack and swarm you."

"We would prepare for them in early spring," White said. "We would fix a different nesting place each year. What worried me was they laid eggs in the middle of the road. I had to take eggs and move them to the side, then block the road. People always went beyond the sign and I had to tell them to move. I had to run people out every day."

The island also has become a useful classroom for science students. Biology students from the Governor's Magnet School visit the island under a program of special study through the William and Mary and Norfolk District. The students study how the Craney Island operation can co-exist with bird preservation.

"We know that the birds come and we work around them without any impact on the mission," Rawls said.



Craney Island worker Ollie White and students from William and Mary put up signs to keep people out of the bird's nesting area. (Photo by Bill Brown, Norfolk District)

Couple collects more than fees during summer

By Ann Marie Reyes
New England Division

Joan and Howard Meyrick have found a way to see the country during their retirement years while still earning a penny or two. During the recreation season each summer, they contract themselves to day-use facilities nationwide as fee collector. This season, Buffumville Lake in New England Division was the Meyrick's latest stop.

According to Mrs. Meyrick, the couple has traveled quite a bit as summer contractors. "We worked at a Corps facility in Tennessee," she said. "We've also worked at facilities run by other agencies in Oregon, Arkansas, Texas, Maine, and Arizona."

The Meyricks took early retirement in 1988 so they could travel. Mr. Meyrick was a machinist for Smith and Wesson. Mrs. Meyrick is a registered nurse.

"We needed to find a way to travel, plus pay our expenses," said Mrs. Meyrick. "Working as contractors is it."

The Meyricks found out about the vacancy at Buffumville Lake through a Corps advertisement in a newsletter. They submitted a letter to the regional office to be put on a mailing list for bidding information.

"We got information on lots of opportunities," said Mrs. Meyrick. "There are usually 90 applications for every 10 openings. We were the lowest bidder for Buffumville Lake."

The Meyricks work 40 hours a week and stay on-site in their camper. They work Wednesdays through Sundays collecting fees from cars and from the "Honor System" vault set up for visitors to use in their absence.

In addition, the Meyricks pass out bags for garbage and answer questions about Buffumville Lake and the surrounding area using Corps maps.

On their days off a volunteer retired couple takes over for them. Vincent and Rita Langlois are spending their second year at Buffumville as volunteer park hosts. They also live on site and perform the same duties as the Meyricks, except they work 20 hours a week.

Besides living on site, both couples get water, sewer, and electrical hookups as well as use of a common telephone.

"Both the Meyricks and the Langlois are working out great," said park ranger Jamie Kordack. "They're fabulous to work with. They're professionals all the way."

Since Buffumville Lake began having park hosts three years ago, Kordack reports that the park experiences few problems. "Vandalism has gone way down," she said. "We don't have many problems because now there are people on site to explain the rules of the park to the guests."

The need for the contractors and the volunteer park hosts at Buffumville resulted from user fees instituted by the Corps two years ago. Other parks have been using park hosts for some time.

"Buffumville isn't the first to use park hosts," Kordack said. "Hopkinton-Everett and the Cape Cod Canal have been using park hosts to improve the outreach to the visiting public for several years."

The Meyricks began working at Buffumville at the beginning of the season and were joined by the Langlois in mid-season. Both couples left when the season ended Sept. 8.



Joan Meyrick, a retired contractor, collects user fees from a visitor to Buffumville Lake.

Around the Corps

General officer news

Maj. Gen. Pat M. Stevens IV, Acting Chief of Engineers, announced on Sept. 13 that Maj. Gen. Russ Fuhrman, formerly the North Pacific Division Commander, will be the acting deputy commanding general. The assignment was effective Sept. 17.

Col.(P) Robert Griffin, Chief of Staff at HQUSACE, has been selected for promotion to brigadier general.

On Aug. 28, Maj. Gen. Pat Stevens IV, Acting Chief of Engineers, promoted Maj. Gen. Bob Flowers, commander of Lower Mississippi River Division, to his present rank on board the *M/V Mississippi*.

Col. Rick Capka was frocked to brigadier general on July 10. He was reassigned as the commander of South Pacific Division in August. Capka previously served as the Assistant Chief of Staff, Engineer, U.S. Forces Korea.

TEC Bosnia support

The Topographic Engineering Center (TEC) continues to support Operation Joint Endeavor in Bosnia.

Recently, in response to a request from U.S. Army, Europe, the Interferometric Synthetic Aperture Radar for Digital Terrain Elevations (IFSARE) was deployed to Aviano Air Base, Italy. The IFSARE collected data on the U.S. sector and a road corridor between Sarajevo and Gorzade. This data will be used to generate image and terrain data.

The system, managed by TEC, quickly collects highly accurate digital elevation data and imagery to support operations. IFSARE uses interferometric radar on a LearJet 36A to collect and record data, then process it on the ground into digital

terrain elevation models. The system can operate in all weather, day or night.

In other developments, the greatest threat to allied ground forces in Bosnia are the millions of mines throughout the Balkans. TEC is supporting a Countermine Task Force to address this danger.

The Minefield Data Base Program will use commercial off-the-shelf hardware and software to create an automated minefield detection reporting system. It will be used to assist the Mine Action Center (MAC) in Tuzla.

In the first task to support this program, TEC members went to the MAC to scan minefield reporting forms onto compact disc. They eventually scanned 13,740 forms.

The second task was to build an interface to the TEC-developed Digital Topographic Support System-Multispectral Imagery Processor (DTSS-MSIP) to import mine data from the original host, the Terrain Evaluation Module-Engineer Obstacle Planning System, query the database and allow users to plot mine data onto maps. The third tasking was to acquire a non-sheltered version of DTSS-MSIP, which is stored at TEC ready for delivery to Bosnia.

Emergency managers of the year

On July 22, Maj. Gen. Stanley Genega, Director of Civil Works, presented the Corps' emergency manager of the year awards. Paul Dobie, chief of Natural Disaster Plans and Policy Section at HQUSACE, was named the Headquarters/Division Emergency Manager of the Year. Emmett Hahn, chief of Readiness Branch at St. Louis District, received the District Emergency Manager of the Year award.

Dobie's award was based on his work as the Corps' representative with the Federal Emer-

gency Management Agency at the national level, activities related to the readiness mission, function guides for major subordinate commands and district chiefs, and oversight of the Response Planning Group.

Hahn's award was based on his work during the Oklahoma City bombing, in the Disaster Field Office during Hurricane Marilyn, and as a member of the National Performance Team.

Fish bypass

Portland District is planning to improve the juvenile fish bypass facilities at the Bonneville Lock and Dam. Plans call for building a 9,000-foot-long transportation flume extending from the second powerhouse, a smolt monitoring facility and two outfall structures for above-water releases. Most of the flume will be underground.

The existing bypass system at the second powerhouse guides juvenile salmon away from the turbines and into a conduit which takes them through the dam and returns them to shallow water below the dam. These areas support predatory fish. The improvements will release the fingerlings into deeper, faster water where predators are less likely to congregate, increasing fingerling survival.

Numerous locations for the new outfalls were considered and modeled at the Waterways Experiment Station, in cooperation with the National Marine Fisheries Service (NMFS) and other regional resource agencies.

The new bypass facilities were recommended as part of a biological opinion issued by NMFS in 1995. These actions are being coordinated with federal, state, and local resource agencies and organizations.

Lake staffer's paintings capture area beauty

Article by Larry Crump
Photo by Ruth Marshall
Kansas City District

One of the first things one notices upon entering the Information Center at Milford Lake, Kan., is an eye-catching diorama. It includes a life-sized bald eagle perched on a large tree, with a colorful painting of Milford Lake Dam and the surrounding area in the background. The stuffed eagle is on loan from the State of Kansas. The painting which sets the scene was done by Milford Lake staff member Jo Vega.

Vega is the project's administrative support assistant and "artist in residence." She enjoys painting as both a hobby and a business and has numerous works of art on the walls and stuck away at her Milford home. She has sold countless others and recently completed a large backdrop for the baptistry at the First Christian Church in Junction City.

Vega has a natural talent, developed in childhood by a class at Kansas State University and lessons from a private individual.

A Kansas native, Vega worked in Finance and Accounting at Fort Riley, Kan., for 13 years before opening her own shop in Industry, Kan. She taught painting for seven years, then decided to join the Corps. That was 14 years ago, and Brad Myers, Milford Lake Project Manager, is happy to have her.

"It's like a fringe benefit having Jo here," Myers said. "In addition to her job as administrative assistant, she has helped decorate the exhibit area,"

including another wetlands diorama that the current scene replaced. She helps retouch existing exhibits and paintings and "we are always asking her 'Does this color match?' or seeking her advice on decorating," said Myers.

Vega also developed the cover of a wildlife brochure that will soon be distributed at the lake.

She prefers working in oils, but does acrylics equally well. She sometimes works from photographs, but prefers to paint a smaller version first.

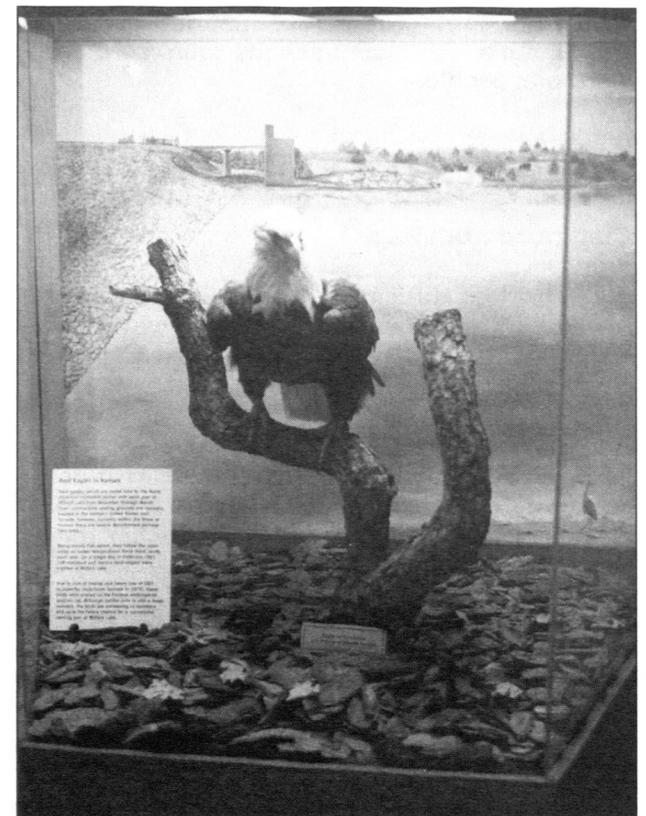
"I enjoyed doing the Milford Dam scene for the diorama because it was right here," Vega said.

She loves to paint animals, but has tried almost everything else, from portrait work to landscapes. She did four big murals for the Sunday School rooms of the First Christian Church in Abilene, Texas, that took about two years to complete.

She worked on the painting in Junction City, which depicts a Jordan River scene, for about a year before she was satisfied. "That was a gift from us to the church," she said. Her husband, Ralph, built the frame and helped mount the canvas.

She painted it at home and they carried the finished work to the church for hanging. Luckily, "we measured first and didn't have to cut later," she said. "The original frame was too large to go through the doors!"

Vega is planning to retire in January from her Corps job. "I want to go into painting more professionally," she said. "I'd like to teach again. And I'd like to paint more and sell them!"



Jo Vega, administrative support assistant for Milford Lake in Kansas, painted the backdrop for this eagle display. In addition to painting new displays and touching up older ones, Vega developed the cover of a wildlife brochure that will soon be distributed at the lake.

Volunteers keep powerhouse tours humming

Article and Photo
By Jennifer Patrick
Little Rock District

They can tell you everything about Bull Shoals Powerhouse. They are on a first-name basis with every powerhouse employee. They even know what place in the powerhouse has the best view.

But they are not powerhouse designers, workers or even Corps employees. They are a special group of volunteer summer tour guides.

"Because of all the cutbacks in 1995, we didn't have the resources or the people to continue the tours," said powerplant superintendent Bill Self. "In the past, the tours were handled by college students or summer help, but when they began counting against staffing numbers, the tours had to be cut."

But Self wasn't ready to cut the tours so easily.

"These tours had become a vital part of tourism in the area," Self said. "They had always been enjoyed and appreciated by the community and the visitors."

So Self went to the *Baxter Bulletin*, a local newspaper, which ran a small article about the tours ending unless volunteer guides could be found.

Seven people volunteered to help the first year. All were retirees from a variety of fields who wanted help their community. After studying information on the powerhouse and going through the tour several times, the new recruits took over.

For three days each week during the summer, the volunteers educated a total of 7,000 visitors about the job of the powerhouse and the role of the Corps, without receiving

one complaint from visitors.

They did such a good job, their dedication and accomplishments were recognized by Representative Tim Hutchinson, who called them the "Fabulous Seven," in an address to the U.S. House of Representatives.

Five of the original seven volunteers returned, and 10 new recruits were drafted, allowing the number of tour days to be increased to four. This year, tours were given on Friday, Saturday, Monday and a half-day on Sunday.

"An average of 61 people tour the powerhouse each day," said Neil Underhill, a returning member of the Fabulous Seven and the group's scheduler.

Tours began in May and normally run until Labor Day, but the volunteers voted to extend the tour season this year until the end of September.

"All of these are truly lovely people who are very dedicated to their communities," Self said. "Many of them are retired, but they do volunteer work at the state park or local resorts in addition to the work here. What they do is a real service to their community."

Communities where the volunteers live also benefit from their work. The volunteers report their hours to local officials. The hours help the communities compete in the state Volunteer Community of the Year and the Community of Excellence award competitions.

And the volunteers don't see their time spent guiding tours in the bowels of the powerhouse as a sacrifice. They enjoy every aspect of their job.

"We get much more out of this job than we give," said Bob Brennan, a railroad retiree. "This is a way for us to do what we like best — working with people. We are giving up

some of our time, but we feel like we are getting much more in return."

Since most of the volunteers have retired from non-engineering backgrounds and aren't from the area, they have to learn about the daily operations of the powerplant and district.

"When we started the new season, I scheduled the new volunteers with some of the veterans so they could get the feel of the tour," Underhill said. "Then they just started on their own when they felt ready. That's really the best way to get started, just jump into it."

Learning about the powerhouse is not the job's only challenge. The 30-minute facility tour involves a large amount of walking, which can be strenuous, and talking in noisy areas, which can strain voices.

On Monday, Friday and Saturdays two tour guides share the job, but on Sunday there's only one.

"People are friendly and very understanding about the schedule," said Dick Robel, a retired salesman. "The groups are kept relatively small, and we show them most of the powerhouse. I've had several people tell me that they saw more on this tour than they did at Hoover Dam."

These guides are not only educating the public, but themselves as well. Through their unique involvement, they have become informed spokespersons for the district.

"Every time I give the tour, I become more knowledgeable about the powerplant and I'm more amazed at this structure — what it took to construct it, how it benefits the local communities and joins the counties, I just love to talk about it," said Regina Gramza, a retired registered nurse.



Volunteer tour guide Bob Brennan greets visitors to the Bull Shoals Powerhouse. Brennan sees the tours as a chance to do what he likes best, work with people.

Hurricane recovery

Continued from Page 1

To add to a difficult situation, heavy rains followed the hurricane adding more water to an overloaded system. The rain-swollen Cape Fear River brought flooding to some areas. When the hurricane moved north it left more water to drain into the basins.

The H&H team had to coordinate with downstream interests. Water was held back at three of the district's lakes to protect from further impact downstream. Falls Lake peaked at 262.7 feet mean sea level (msl) on Sept. 8, two feet from the spillway top. Preliminary estimates are that the Falls Lake prevented \$75 million in flood damage from the Hurricane Fran and its aftermath.

At the B. Everett Jordan Lake and Dam, the Corps held back an additional 113 million gallons of water in its reservoir that would otherwise have been added to the peak flooding. Preliminary estimates are that the reservoir saved \$42 million in flood damage from the hurricane.

At the John H. Kerr Reservoir that feeds into the lower Roanoke River, the Corps held back an additional 384 billion gallons of water. Preliminary estimates are that the reservoir saved \$30 million in flood damage from the hurricane.

Some Wilmington District employees had homes damaged but couldn't get to closed-off beaches to assess the damage. There was a 10 p.m. to 6 a.m. curfew in Wilmington, N.C.

Ron Moore headed the Emergency Support Function-3 (ESF-3) office in the FEMA Disaster Field Office in Raleigh. ESF-3 is the liaison between the Corps and FEMA and ensures mission accomplishment.

Philadelphia District sent the dredge *McFarland* to do emergency dredging of the Ocean Bar Channel into the port of Wilmington.

In addition, the district used SHOALS (Scanning Hydrographic Operational Airborne Lidar Survey) to survey coastal areas impacted by the hurricane. SHOALS is a helicopter-mounted laser hydrographic surveying system which measures navigation channels, depths and general bathymetry.

Kure Beach and Topsail Beach were hard hit. Topsail Beach suffered a complete overwash; as many as five new inlets breached the island. Some compared the damage to Hurricane Hazel in 1954.

President Clinton visited Raleigh, N.C., Sept. 14 to meet with local, state and federal officials working the disaster recovery and fly over the im-

acted areas. Assistant Secretary of the Army (Civil Works) H. Martin Lancaster praised the Corps' role and the hard work of those involved in the relief effort.

Wilmington District Engineer Lt. Col.(P) Terry R. Youngbluth and Maj. Gen. Stanley Genega, Director of Civil Works, attended the meeting with Lancaster.

"The President publicly recognized the work that the Corps of Engineers is doing in North Carolina and thanked us for our efforts," Youngbluth said. "The governor, too, is pleased with how we quickly responded to provide water, ice and emergency power, and now to remove debris across the state. The FEMA director also expressed his appreciation during this meeting."

Youngbluth praised the efforts of the Corps team responding to the disaster, from Wilmington District to volunteers from other districts who responded to assist in the disaster recovery.

"It requires a team effort," Youngbluth said. "This is a real challenge to the Corps and Wilmington District, especially just after Hurricane Bertha."

(Tim Dugan was working in Wilmington District during recovery operations after Hurricane Fran when he wrote this article.)