US Army Corps of Engineers
St. Paul District

# Crosscurrents

Vol. 15, No. 6 June 1992

## *Great Chicago Flood*

# St. Paul District helps plug subterranean flood

by Ken Gardner

In many ways, the "Great Chicago Flood," which occurred in April, was like floods anywhere. There were flooded basements, businesses closed, the electricity was off, thousands of workers were sent home and transportation systems were disrupted. However, this flood event was unique — all the flooding took place some 30 to 50 feet below the streets of downtown Chicago.

At the same time, it was similar to other major disasters in that people from St. Paul District responded to the call for assistance, just as they had following the San Francisco earthquake, Hurricane Hugo and Desert Storm.

Four people from St. Paul were involved in the Chicago emergency during the first two weeks of the month-long operation. Their response — usually on short notice, even on Easter Sunday — showed once again that St. Paul is ready and willing to help. The four included LTC Mike Mahoney, deputy district commander; CPT Mark Miller, Construction Branch; Dan Reinartz, Hydraulics Section; and Ken Gardner, Public Affairs.

The emergency started on April 13, when occupants of a number of buildings in downtown Chicago's Loop area discovered water in their basements. It turned out that the water was coming from a network of tunnels about 50 feet underneath downtown Chicago. The more than 70 miles of tunnels once housed a miniature train system used to deliver coal and merchandise to downtown buildings underground and to remove trash and cinders from the same buildings. The system was in operation from about 1905 until 1959.

Following the discovery of the flooded basements and tunnel network, the City of Chicago, assisted by the Corps' Chicago District, located a major leak in the tunnel system where it crossed beneath the Chicago River just north of the Loop.

Because of flooded basements and sub-basements, many buildings in the Loop were closed, including the 110-story

Chicago Flood, *continued on page 2*

# Students, civil servants honored

Photos by Georgia Stanonik

**The St. Paul District honored Students of the Year and Civil Servants of the Year during May. LTC Mahoney recognized students Pamela Kenyon (left) and Julia Washenberger (right). Kenyon is with Project Management Branch. Washenberger works in Geotechnical, Hydraulics, and Hydrology Engineering Branch. Profiles of the district's three Civil Servant of the Year recipients begin on page 5.**

Chicago Flood , *from page 1*

Sears Tower, the world's tallest. Thousands of workers were sent home. Two subway routes through the Loop were also closed for several weeks because of flooding. Power was shut off for much of the area for several days.

The City of Chicago took initial action for dealing with the emergency with the Corps providing technical assistance. However, after several days the city was unable to block the leak.

About five days after the leak was discovered, President Bush signed a federal emergency declaration. Based on this declaration, the Federal Emergency Management Agency gave the Corps of Engineers the mission to stop the leak and pump water from the tunnel system.

Three emergency operations centers were established to deal with "the invisible flood," as some people called it. The main EOC was the inter-agency command center set up by the city in an empty building near the Chicago River. The Corps had space there along with various city departments. The Corps also had EOCs at the Chicago District and at North Central Division. All of the EOCs operated 24-hours a day.

Mahoney spent a week at the inter-agency command center and was in charge of the overall pumping operation. Miller served as chief of the Corps' night shift team at the inter-agency command center. Reinartz worked at the Chicago District's "Drawdown Center" for 12 days starting on Easter Sunday. He monitored water conditions in the tunnel system during the pumping operation, calculated pumping rates and determined the location of pooled water remaining in the tunnels as the drawdown progressed. Gardner worked at the inter-agency command center taking media questions and assisting with the daily media briefing.

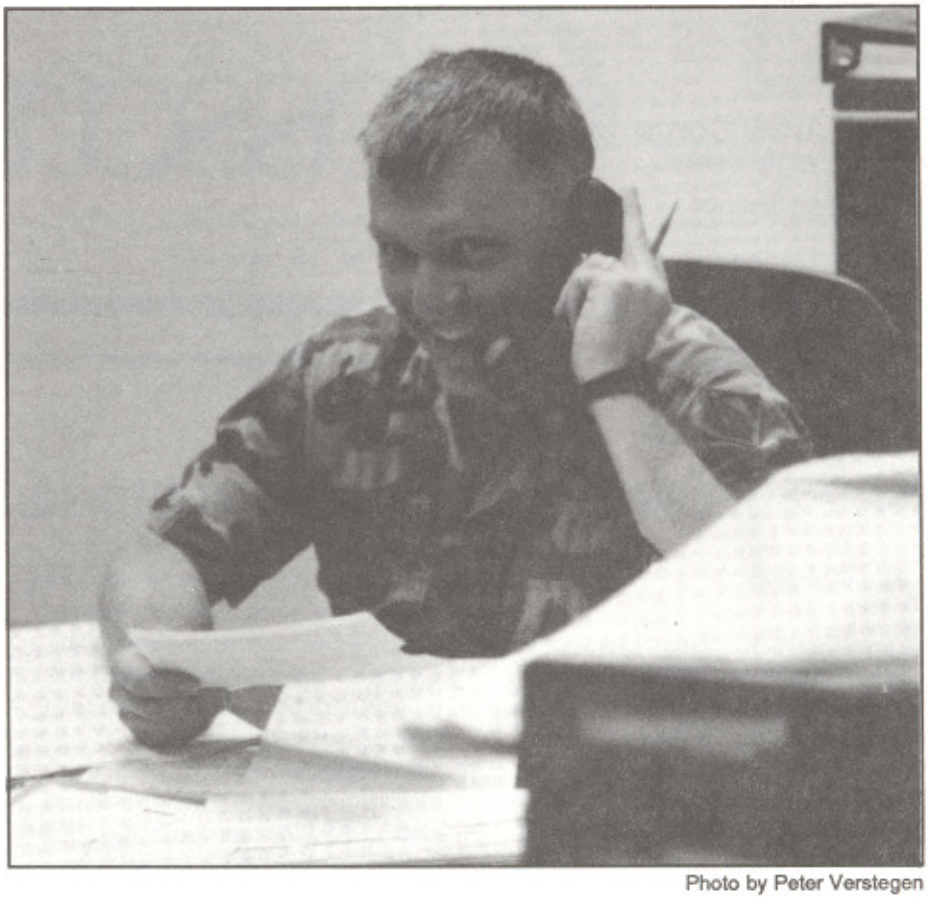


Photo by Peter Verstegen

**Captain Mark Miller (above) fought the Chicago flood as chief of the Corps' night shift team at the inter-agency command center. Miller works for the district's Construction Branch at the St. Paul Resident Office.**

To stop the leak, a series of 72-inch shafts were sunk into the tunnel on both sides of the river. Sandbags and rock were dumped down the first shaft on each side of the river to form a partial blockage which slowed the flow of water from the river into the tunnel system. A special grouting mix formulated for use under water was pumped into the second shaft on each side of the river to form a grout plug in the tunnel. This was a temporary plug designed to stop most of the flow from the river into the tunnels. Placement of this temporary plug allowed the water to be pumped from the tunnels and construction of the permanent bulkheads.

A third set of shafts were sunk on each side of the river for crew access to build permanent concrete bulkheads in the tunnel. After the permanent bulkheads were completed, the plan called for contractor crews to enter the tunnel system with portable pumps to pump pooled water from low spots in the tunnel system.

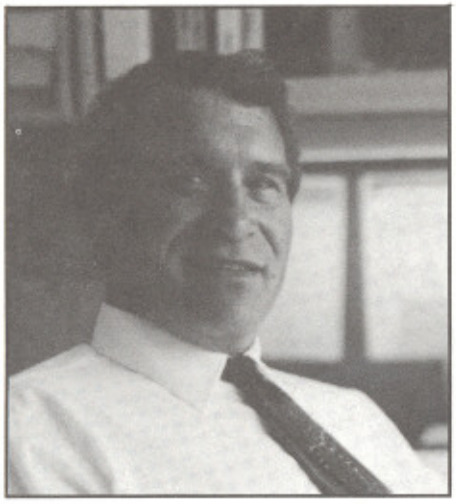
The Corps' role in the "great Chicago flood" ended in mid-May when the permanent bulkheads were in place on both sides of the leak and most of the water was pumped from the tunnel system.

As a result of this freak but costly incident, the City of Chicago is planning to add bulkheads in the tunnel system at each of the eleven locations where the tunnel crosses under the river.

# Acquisition Corps changes the way we work

When you dealt with Contracting Division in the old days, it was either Procurement Branch for small contracts and purchases, or Contracts Branch for big contracts.

Never more.



Fred Mitchell

The Defense Acquisition Workforce Improvement Act (DAWIA), signed into law November 5, 1990, changed the organizational chart, job standards, and training requirements for the contracting career field.

DAWIA mandates that the Secretary of Defense establish policies and procedures for effective management of people serving in acquisition positions in the Department of the Defense (DOD). The law also ensures that, to the maximum extent practicable, acquisition workforce policies and procedures are uniform in their implementation throughout DOD.

Locally, Contracting Division recently reorganized to make acquisition management more effective and to improve its internal span of control. Lead by a contracting officer, two essentially identical teams distribute the work load between them.

"It's like a conductor for a symphony," said Fred Mitchell, supervisory contract specialist and one of the new team leaders. "Without direction and a score, the music would sound a chaotic. With a contracting officer here as conductor, you have members of the orchestra working from the same score, playing together. The new structure allows us to work together for effective acquisition management."

"The result of all these changes will be to make the acquisition area in the district more customer-oriented," said Pat Johnson, supervisory contract specialist and leader of the other new team.

"The law created the Acquisition Corps," said Johnson, "As a result, we will have a more professional workforce, and be more knowledgeable."

Pat Johnson

"The law takes procurement processes out of the dark ages," said Mitchell. "The taxpayer was upset that DOD was making too many costly mistakes by purchasing $600 hammers and so on."

"Members of the Acquisition Corps are required by the law to have mandatory training," said Mitchell. "The law establishes minimum education requirements in order to be an 1102 (which designates a series of job titles in the contracting field). This means training for everyone in Contracts, for entry level, for working level, and for management."

DAWIA affects acquisition-related positions in 11 areas: (1) Program management; (2) Systems planning, research, development, engineering, and testing; (3) Procurement, including contracting; (4) Industrial property management; (5) Logistics; (6) Quality control and assurance (7) Manufacturing and production; (8) Business, cost estimating, financial management, and auditing; (9) Education, training, and career development; (10) Construction; (11) Joint development and production with other government agencies and foreign countries.

"The DAWIA training requirements mean that the district will have some people gone," said Johnson. "Because of this, acquisition-related work may take longer until our people are trained."

"The new law also means there will be a single emphasis on a team approach to accomplish the objective," said Mitchell. "As contracting officers, we must have a strong background to direct the acquisition team to achieve the most efficient contracting methods possible."

Concluded Mitchell, "We're not here to hinder. We're here to get things done, but not in the same old way. Our goal is to provide better service that is contractually correct."

# Rojean Ashley grows in Upward Mobility

Rojean Ashley

Articles and photos by Rosemarie Braatz

Rojean Ashley began working for the Corps at Lock and Dam No. 7 in 1982 as a clerk-typist. Having a preference for outdoor work and experience with machinery, she grabbed the opportunity when offered the Lockperson training under Upward Mobility.

Rojean enjoys the challenges of her new job. "I rode the crane basket to help install the roller gate heaters. I found that I wasn't even scared. I just concentrated on my work."

Raised on a farm, she drove tractors, operated and worked on farm implements, and "helped my dad worked on cars," Rojean says. She had studied secretarial work at a Winona technical school, and operated a sewing machine at La Crosse Garment Company for about a year before coming to Corps of Engineers.

"I'd had a chance to get somewhat familiar with the work, and always thought it would be interesting to work on the lock and dam. But now that I've 'got my coveralls,' so to speak, I find it's thoroughly fascinating. But I value the cross-training, too, and want to keep up with the changes in clerical duties, computers, and regulations."

Rojean plays golf and bowls in her leisure time. She and her husband, Terry, have an eight-year-old son, William.

# Upward Mobility allows Randy Piel to take a dive

Randy Piel

Randy Piel was hired as a Lock and Dam Operator at Lock and Dam No. 5A in June 1990, on his completion of the Upward Mobility program at Lock and Dam No. 4.

Also in 1990, Randy took scuba diving lessons at the Winona YMCA, in preparation for the full divers training course offered by the Corps. That September, he trained in Key West, Florida and is now a full-time member of the diving team.

Randy had begun working with the River and Harbors Unit in 1982, and became a permanent seasonal employee in 1983. Randy had worked with the Rivers and Harbors Unit aboard the Dredge Dubuque on the Illinois River, and in numerous construction, maintenance, and rehab projects, particularly the locks and dams. He transferred to Lock and Dam No. 4 in spring, 1989.

As Lockmaster Lon Meixner says, "Randy had a thorough knowledge of the lock and dam facilities, equipment, and machinery, even before he began the Upward Mobility Training."

Randy and his wife, Judy, who make their home in Fountain City, have two children, Briana, six, and Cody, four. Judy works in the housing department at Winona State University.

# Father inspires award recipient

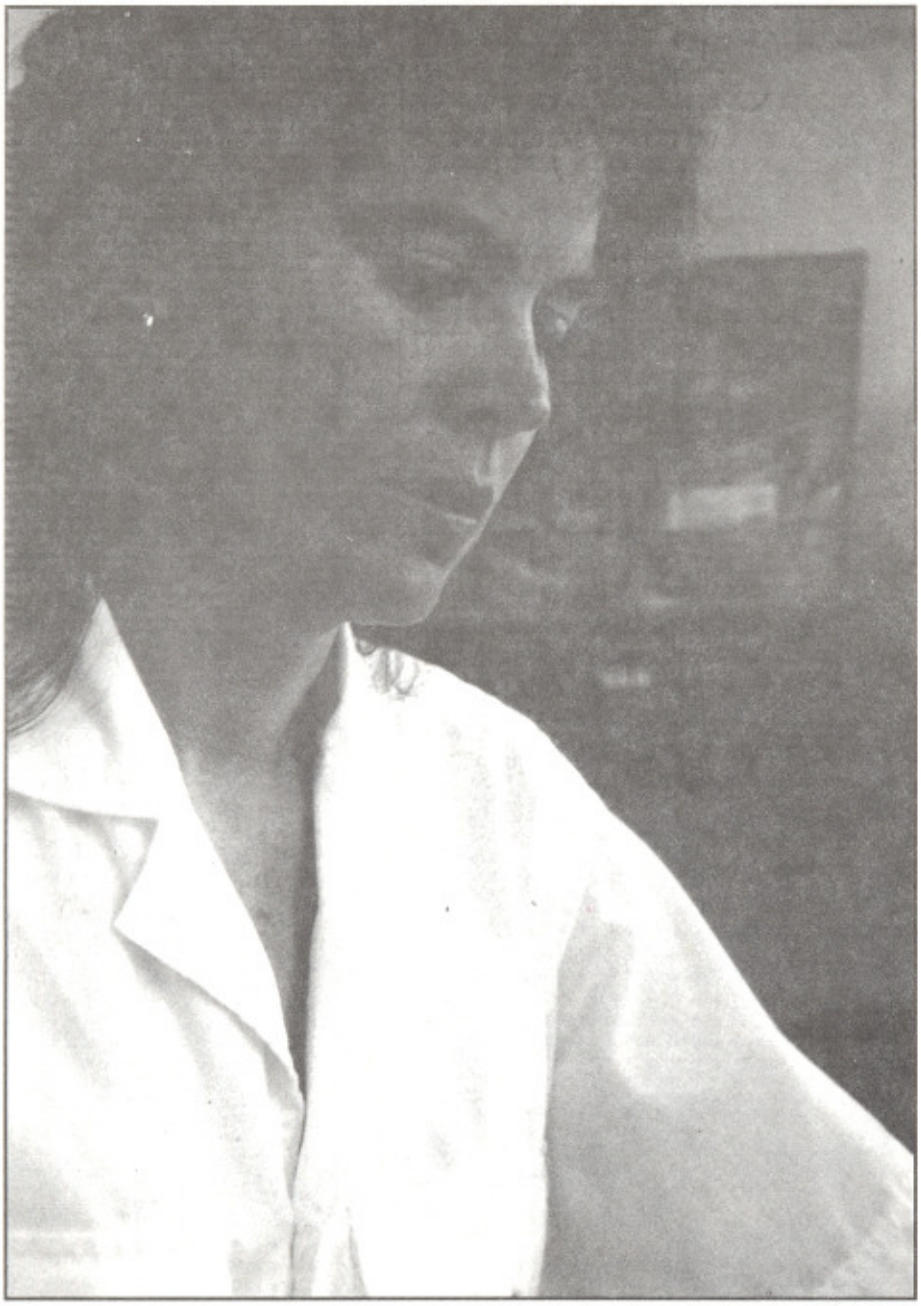


photo by Peter Verstegen

Melissa Shortridge

by Peter Verstegen

"My dad graduated from Purdue University and later went to work for the Corps of Engineers," said Melissa Shortridge, one of three Civil Servants of the Year from the St. Paul District. "He stayed in Washington, D.C. as a planner with the Board of Engineers for Rivers and Harbors until he retired."

In high school, Melissa excelled in math and science, and later earned her degree in civil engineering — also from Purdue.

"When growing up, I wanted to be in construction in the field," said Melissa. "I still can't believe they pay me to do this — most days. I like to see things being built."

Today, as an engineer for the St. Paul District in Winona, she sees her childhood visions take shape. Melissa has worked on the major maintenance program, the Rochester Project, and looks forward to construction of new control buildings.

Melissa's professional experience in the district has evolved. She participated in rotational training in St. Paul, spent three months at Ft. Carson, Colorado, worked at projects in North Dakota and Duluth, Minnesota, then settled in Winona. "I was real lucky there was an opening at the flood control project here," she said. "At the time, my sister lived in Winona. Now, my brother lives here."

She works equally well with both construction concepts and people. "Melissa's superior analytical skills allow her to assimilate the numerous facts and concepts associated with complex construction problems," said the civil service recognition brochure. "Then she uses her verbal and written communication talents to bring out resolutions."

Being a woman in the construction field occasionally challenges her. "It's difficult being a woman in a male dominated profession," Melissa said, pausing to reflect. "I've worked for some very good people. Sometimes, though, a contractor will be sensitive when he has a woman remind him to do the work according to the contract."

And in what is now a family tradition, when Melissa takes her four children to projects, "they get really excited and ask whether this is my project."

# Civil servant casts long shadow

by Peter Verstegen

"I started my federal employment the same day as a total eclipse," said Accounting Technician Barbara Reckinger. "It was February 26, 1979."

Today, it is Barb who casts the long shadow as one of three Civil Servants of the Year from the St. Paul District.

Barb serves as a vital link in Resource Management for project managers, and provides them reliable, timely information on project expenditures and obligations. Her performance helps the project managers meet scheduled expenditures and obligations.

Water projects have percolated throughout Barb's life. "At age 10, I hand pumped well water to irrigate the tomatoes, said Barb. "My family had a farm in the Red River Valley, at Barnsville. Pumping water by hand seemed endless, but," she sighed, "weeding the huge garden by hand took even longer."

The work ethic that Barb learned by mowing the lawn with an antique reel mower and picking sweet corn and potatoes by hand applies to her personal and professional life. By sharing the chores with seven sisters and one brother, she learned to work with others. Her work ethic transferred to high school, where she graduated with honors.

When not at work, the proud mother of two attends Lakewood Community College, where she studies for her undergraduate degree. As a hobby, she sings on special occasions when friends and family gather.


Federal Executive Board photo

Barbara Reckinger

# Spitzack coaches for a winning team

by Peter Verstegen

As one of three Civil Servants of the Year from the St. Paul District, Design Branch Chief Chuck Spitzack feels confident that he's on a winning team.

"When growing up, I played baseball every chance I could," said Chuck. "I like participating on a good team. That's what this district means to me. The people here have confidence and a team spirit. We know we can do very good work."

The very good work Chuck refers to includes the many projects now under way and past projects such as the Lock and Dam No. 1 rehabilitation. "I became involved in that project in 1978," he said. "We did some very innovative work that was eventually recognized with a Presidential Design Award in 1984."

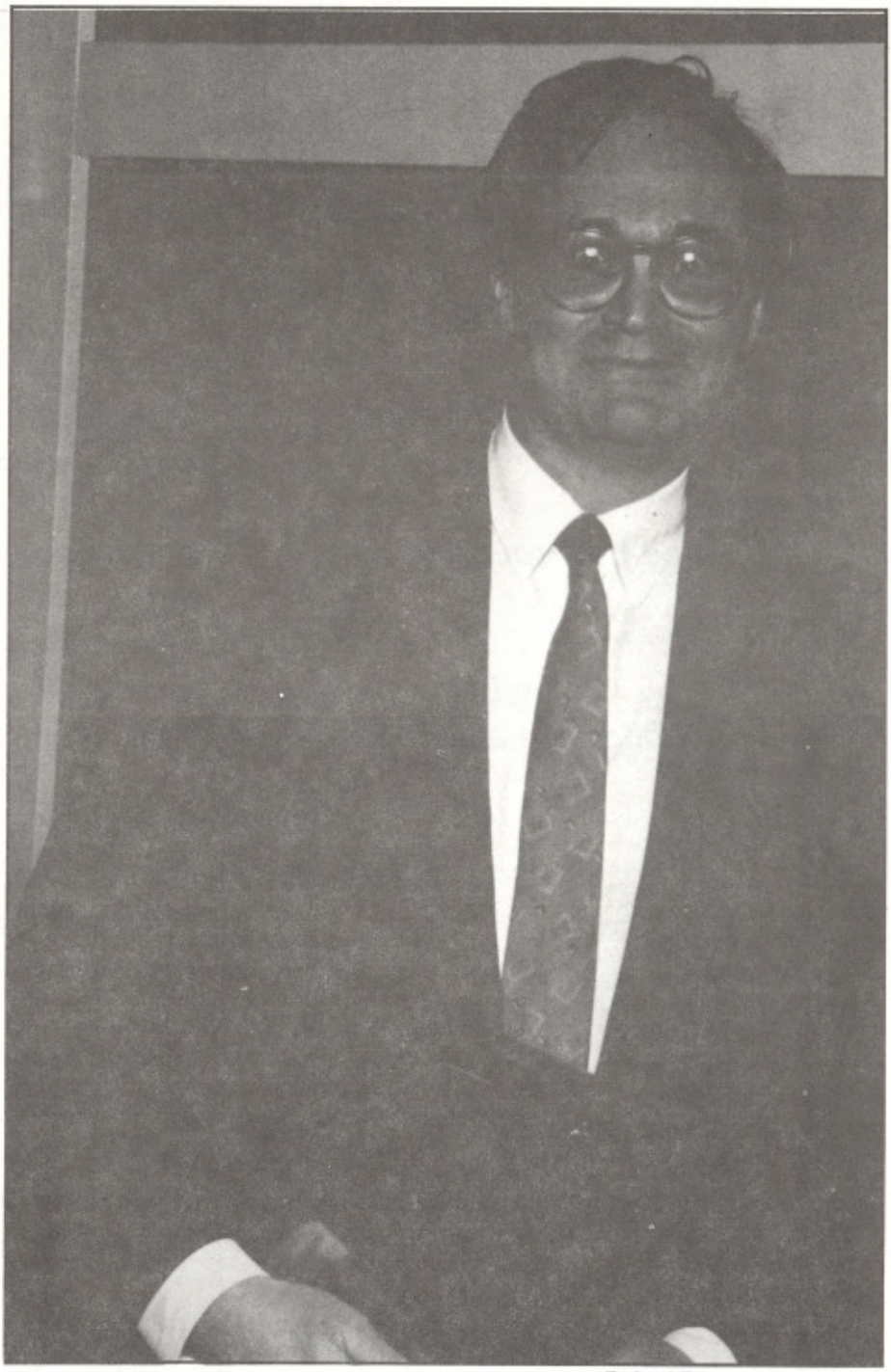
The Civil Servant of the Year recognition brochure says that under his leadership the district accomplished the heaviest design work load in its history by completing plans and specifications for eight major projects with a total cost of $700 million. In spite of his demanding schedule, Chuck provided patient coaching and insightful counseling for his associates.

Along the way, the University of Minnesota graduate found the time to earn two masters degrees—one in civil engineering, another from the University of St. Thomas in business administration.

Chuck's interest in design and construction go back almost as far as his interest in baseball. As a 14-year-old with three brothers and three sisters, Chuck began helping his father with his retail lumber and construction business. It was there he developed an interest in construction design.

In his own family, Chuck spends time with his two children, Charlie and Samantha, and his wife, Chris.

"I enjoy my work and the people that I work with," said Chuck. "Work and play is all pretty much the same for me."



Federal Executive Board photo

Chuck Spitzack

# Awards Ceremony and Picnic
# Friday, June 26
# Como Park, St. Paul

## *Activities*

7 a.m.

***18-hole golf tourney***

9:07 a.m.

***Nine-hole round of golf***

10 a.m.

***Volleyball***
***Children's activities***

12:15 p.m.

***Lunch***

1:30 p.m.

***Awards***

2:15 p.m.

***Volleyball***
***Individual leisure activities***

2:30 p.m.

***Clean-up time***

3:30 p.m.

***Picnic officially ends***

## *Details*

### *Bring Your Own Lunch*

$2 ticket, event only; free for age 5 and under: Popcorn, sno cone, pop, activities

### *Catered Lunch*

$2.50 ticket age 5 and under; $5 ticket for ages 6-10; $7 ticket for event and food for 11 and over: Popcorn, pop, sno cone, activities and lunch. Lunch menu is chicken, baked beans, potato salad, cole slaw, biscuit.

### *Children's Activities*

Bean bag toss, three-legged race, bubble play, badminton, clown, playground, frisbee golf, zoo, pony rides ($1), midway rides (50 cents or $1), miniature golf ($1.25)

### *Adult Activities*

Join the golf or volleyball tournament or enjoy some frisbee golf, horseshoes, the zoo and conservatory, softball, kittenball, or walk, run, bike, or roller blade around the lake. The awards ceremony begins at 1:30 p.m.

### *Who sells tickets*

15th floor—Joanne Lewis, Rm. 1516
14th floor—Vicky Fetterly, Rm. 1405
13th floor—Kristin Kolb, Rm. 1315
12th floor—Jan Graham, Rm. 1222
11th floor—Lupe Santos, Rm 1109
10th floor—John Miller, Rm. 1033
9th floor—Patrick Peine, Rm. 905
Sibley Building—Jan Pream, Rm. 636

# Army Corps of Engineers Commander sends Engineer Day message

Since the Revolutionary War, history has cast the Corps of Engineers in key roles.

Last year, Corps team members helped Kuwait recover from the ravages of war. Thanks in large part to these efforts, Kuwait now shows little evidence that a war ever took place.

Then just recently, the Chicago River poured into underground freight tunnels beneath Chicago's business district, causing enough destruction to paralyze the city. Again, the Corps played a key role in the recovery.

History is not done with the Corps of Engineers, and we already have hints of what is coming.

Both the military and civilian sides of the Corps are already involved in the fast-growing field of environmental engineering, and we can expect our involvement to increase.

We are also reexamining our role in the post-Cold War era. The Army's new operations manual states that the ultimate objective of military operation is to preserve peace or, if we go to war, the return of peace. The Corps will play a vital role in preserving and sustaining peace.

Whatever happens, we can be certain that events will demand our very best in technical competence, flexibility, innovation, and speed. We cannot maintain our competitive proficiency without reorganization, and that may prove to be the most demanding task of all.

There is not doubt in the ability of our Corps team to face these demands because we have triumphed over seemingly insoluble problems in the past year with skill, creativity, and can-do responsiveness. The whole world saw the results in Southwest Asia, and America sees the results every day in the thousands of quiet ways the Corps serves our great nation.

I am proud of the efforts put forth by each of you. You have added another bright chapter to the many which attest to the Corps' professional reputation. Without your individual contributions, that added push, that extra effort, our Corps would not have carried out its many missions nearly as well. I commend you all for a job well done.

As we look to the future, the challenges of service to the nation will continue, and there will be more unusual challenges like Kuwait and Chicago. I am confident, as I know you are, that our Corps of Engineers will meet them all with the same qualities, and the same results. Essayons!

C.E. Edgar III

Major General, USA

Commanding

## Retiree news

One of the St. Paul District's oldest retirees, Victor A. Peterson, was 94 years old, May 24. His son said that Victor worked in Hydraulics and retired in the 1960s after nearly 40 years of service. Victor and his wife are reported to be in good health and Victor still drives a car.

Victor lives at Stonegate Trailer Court, Lindstrom, MN 55045.

## Hello

**Constructions Operations:** Barbara Bellefy, Kristina Block, John Bock, David Casey, Jeff Clauson, Karen Cress, Deborah Griffith, Robert Hamilton, Robert Hanson, James Hastings, Donald Hatfield, Timothy Jackels, Paul O. Johnson, Douglas Kelly, Raymond Larson, Karl Ledoux, Thomas Mattis, Larry McClellan, Rodney Pederson, Eric Roers, Maria Roherty, Sven Telander, Scott Tichy, Brian Toenges, Richard Vaughn, Duane Wilson.

**Information Management:** Jeffrey Penick

**Engineering Division:** Michelle Trombley.

## Good-bye

**Planning Division:** Greg Busacker.

**Real Estate:** Bobby Daniels.

**Construction-Operations:** Rodger A. Johnson, Loretta Lipke, Laura Mendoza, Rodney Raley.

**Resource Management:** Robert Koenig

**E.E.O. Office:** Amy Soler

## Reassigned

Stan Kumpula has been temporarily reassigned to Chief of Engineering Management Branch.

# Many small actions impact Corps-wide fiscal integrity

You may have heard of the "butterfly effect," where minute changes in the air pressure generated by the wings of a butterfly in Peking, China eventually develop into a hurricane along the Gulf Coast of the United States.

The principle can also apply to an organization like the Corps of Engineers. An accumulation of inaccurate reports can work their way into the system to create a disaster for the Corps, Congress, and the taxpayer.

Similarly, minor transactions throughout 37 Corps districts, which lack significance at the local level, may undermine the integrity of financial reports the Corps presents to higher authorities. Information that lacks credibility undermines the budget process.

For example, charging the proper account by vigilant use of the one-hour rule, accurately estimating earnings each month, and allocating training costs are all areas where variations seem insignificant until they become aggregates.

The Corps-wide one-hour rule means that labor specifically identifiable to a particular job or project is charged to cost accounts in multiples of full hours only. Charges for working time are rounded to the nearest whole hour.

In the St. Paul District, the one-hour rule also applies to sick leave and annual leave, which you may use in full-hours only. Compensatory time and or credit hours may be recorded in quarter-hour increments that you work or use.

Before his retirement this month, Lieutenant General H.J. Hatch, chief of engineers, had expressed concern that employees may feel pressured to adjust accounts to make expenses appear to be within "acceptable" ranges.

General Hatch became alarmed over instances where cost transfers, cash advances, erroneous billings and overstated sales were fed into the accounting system to mask cost overruns and operating budget deficits, and that reports generated from the data were inaccurate.

"Heads of technical functions have a responsibility to ensure that their accounting records and reports properly reflect the financial condition of the projects, programs, and revolving fund accounts," said Hatch. "Our vigilance toward sound financial management practices must be on the same level as our vigilance in managing both total projects and each technical stage of those projects."

## Diversity Day offered at La Crosse

"We see people differently than they see themselves," said Equal Employment Opportunity Assistant Joann Meier. "We box them in." These were among the lessons from "The Magic of Attitudes and Perceptions," an exercise that was part of the St. Paul District's first Diversity Appreciation Day for field personnel held in La Crosse, Wisconsin, May 6.

The program attracted 57 employees from the locks and dams, the Fountain City Boat Yard, area and resident offices, recreational sites, and the dredge, William A. Thompson.

## Commander honors EEO efforts

At June staff meeting, COL Richard W. Craig, district commander, honored five district people and a district division for promoting equal employment opportunity (EEO).

EEO honors went to LTC Mike Mahoney, Stan Kumpula, Chuck Spitzack, Al Geisen, and Greg Frankosky. Planning Division earned the Commander's EEO trophy for development of women, participation of initiatives that facilitate employment of women, examination of issues that contribute to work place bias for women, reasonable accommodation for employees with disabilities, support fort Federal Womens Program Committee, and American Indian Tribal Liaison work.

*Crosscurrents*

US Army Corps of Engineers
St.Paul District

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