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St. Paul District

Crosscurrents

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• Revolutionize Effectiveness: Satisfy the Customer; Build the Team

District forges strong ties with river communities

By Ken Gardner
chief of Public Affairs

Editor's note: Ken Gardner wrote the following as a news release to review district activities during the 1997 flood.

Before

In the years leading up to 1997, the St. Paul District worked with a number of communities along the Red and Minnesota Rivers to provide permanent flood damage protection. In most cases, these projects involved design and construction of permanent levees, concrete floodwalls, and pump stations. As a result, 10 permanent Corps-built projects helped reduce flood damages during 1997.

A major flood-damage reduction project was under study at Grand Forks. An earlier study for East Grand Forks had been completed in 1987 and was inactive.

In early March, after the release of the first numerical flood outlook by the National Weather Service, the district requested and received special authorization to begin construction of emergency levees before the spring runoff began. When the runoff began in late

March, the Corps was working with more than 30 communities to improve their defenses against the predicted record flooding.

During

The district initiated emergency flood operations when floods began. The district established an Emergency Operations Center (EOC) in Fargo to coordinate the missions. EOCs would be established later in Grand Forks and East Grand Forks as flood activities moved north in advance of the crest. Emergency operations included construction of emergency levees by Corps contractors in dozens of communities; distribution of millions of sandbags; loan or lease of dozens of pumps; and lease of heavy equipment to assist communities with cleaning frozen ditches and creeks.

The district spent about \$15 million to help more than 30 communities with emergency operations. Corps economists estimate that emergency operations prevented about \$100 million in the Red River of the North and Minnesota River basins.

After

While emergency operations staff

worked to help protect communities in the northern end of the Red River basin, other crews from the district were getting involved in the recovery work at Grand Forks and East Grand Forks. The Federal Emergency Management Agency (FEMA) assigned recovery missions of water supply, dewatering facilities and providing emergency housing for city fire crews. FEMA also assigned the Corps the monumental task of debris removal at Grand Forks. Corps contractors moved more than 700,000 cubic yards of debris and emergency levee materials from the city to the landfill west of town. At the peak of the debris removal project, contractors hauled about 1,200 truckloads of debris daily. Later recovery missions included cleaning out sewer lines, preparation of sites for temporary housing and the demolition of about 140 structures (houses and separate garages) which had been condemned by the City of Grand Forks.

Following the floods, the Corps worked with officials from the two cities, the counties and the states to seek solutions to flooding.

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• Revolutionize Effectiveness: Build the Team

District's Toastmasters build youth leadership at St. Paul school

Russell Williams, chief of Resource Management (right) and Jaralyn McNeal, a fourth-grade student standing at the podium, participated in the Youth Leadership Program at the Benjamin Mays Magnet School in St. Paul. The Heritage Toastmasters Club at the Corps of Engineers sponsored the program from January through March 1998. "This is the second year that the club has hosted the event," said Williams, event chair. "The activities exhibited teamwork among the members of club, the district's Equal Employment Opportunity Office, the St. Paul Companies and Minnesota Mutual Insurance. Working with the principal, Dr. Graneze Fretwell, and teacher Jenny Johnson, we taught the students to run meetings and to speak before their peers and others." Fretwell added, "This is the only program of its kind in an elementary school."

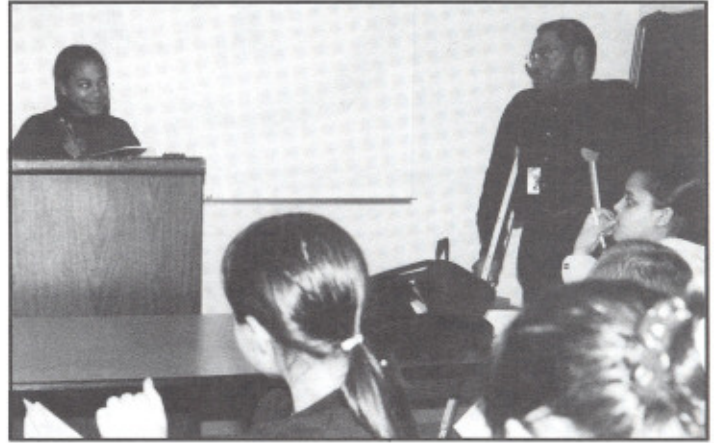


Photo by Peter Versteegen

• Invest in People

Repetitious body movements result in cumulative trauma disorders

By Ron Scott, Safety Office

Cumulative trauma disorders (CTDs) are repeated body movements that cause afflictions of the muscles, tendons and nerves. They are also referred to as repetitive strain injuries, repetitive motion trauma, or occupational overuse syndrome. A CTD is not a specific injury, but rather refers to a whole class of disorders with similar characteristics.

The cause of these disorders is small tissue damages or tears from routine stress that are initially unnoticeable. When daily rest and overnight sleep fail to completely heal these injuries, this tissue damage carries over to the next day. When the damage exceeds the body's ability to repair itself over time, the problem may escalate, resulting in a CTD.

One of the best known CTDs is carpal tunnel syndrome. Some

others include tennis elbow, tendinitis and bursitis.

Working in an awkward or unnatural posture can aggravate CTDs. Excessive bending and twisting of the wrist or repeated elbow or shoulder elevation are typical awkward postures. Causes may include inadequate work space, improper seating, inappropriate tool handle design, or awkward lifting techniques.

Forceful exertions can place extreme stress on muscles and joints. Examples include using a manual screwdriver for high-torque operations, lifting heavy objects or merely using unnecessary force to perform highly repetitive work like typing. Body tissues need time to recover after exertion. Highly repetitive work, especially in conjunction with awkward postures, can stress the tendons, resulting in irritation and inflammation.

Future articles will discuss carpal tunnel syndrome, the ailment of the computer age.



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1998 Civil Servants of the Year

• Invest in People

Making words work satisfies Kruchten

By Jessica L. Shallow
student in Public Affairs



“What I like best about my job is working with material from a variety of disciplines. I also like to work with words. There is a certain

satisfaction in making something sound good and look good,” said Marilyn Kruchten, writer-editor in the Management and Evaluation Branch of the Engineering and Planning Division (PE) and one of three named Civil Servant of the Year.

Her job requires writing and reviewing long and short reports and correspondence throughout PE. She also helps other offices that are working on a special project and need her assistance.

One of her nominators said, “Marilyn is always pleasant, courteous, willing to accept any task she is given and has helped others in the office to become better writers. Her performance over the past year has been typical of her 28-year career with the Corps of Engineers – exemplary.”

One of the projects in which Kruchten played a critical role was the editing of the Floodplain Management Assessment (FPMA), which achieved the Chief of Engineers Merit Award in 1996.

Kruchten, cont. on page 5

• Invest in People

Working with local interests satisfies Spychalla

By Jessica L. Shallow
student in Public Affairs



“What I like best about my job is that I deal with people, primarily the local interests, in trying to solve water problems,

usually flooding-related, by developing a solution that we can jointly agree upon,” said Bill Spychalla, project manager and Civil Servant of the Year.

Recently, Spychalla received the North Dakota Water Wheel Award for distinctive leadership and perseverance in motivating development of the state’s water resources.

These traits illustrate what motivated Mary Street, Human Resources (HR), to nominate him for Civil Servant of the Year.

“Bill Spychalla is an outstanding employee and would make an excellent Civil Servant of the Year,” said Street.

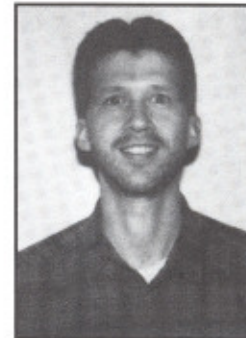
Spychalla is currently the St. Paul District project manager on the Devils Lake projects. He has spent 27 years working for the St. Paul District, mostly in the Red River of the North Basin. He has worked on most of the water projects in the Red River of the North Basin, including Sheyenne

Spychalla, cont. on page 5

• Invest in People

Tapp likes the variety of his work

By Jessica L. Shallow
student in Public Affairs



“The best thing about my job is that I get to do a variety of things. I get to work with a lot of people. Something

that has helped me in working with them is becoming a good listener. I’m always open to consider what others have to say,” said Steven Tapp, one of the Civil Servants of the Year.

Tapp is a channel maintenance coordinator at the Mississippi River Project Office in Fountain City, Wis. He coordinates the navigation-channel maintenance dredging activities with federal, state, and local agencies and organizations. The agencies include: the Wisconsin, Minnesota, and Iowa departments of Natural Resources; the U.S. Fish and Wildlife Service; the U.S. Coast Guard; the National Park Service; and the Environmental Protection Agency (EPA).

As part of his channel maintenance duties, Tapp discusses dredging activities and coordinates inspection team meetings for placement of dredged materials and for long-term planning. He also gives

Tapp, cont. on page 5

• **Seek Growth Opportunities:
Enhance Capabilities**

Memphis District repairs Thompson

By Brenda Beasley
Memphis District Public Affairs
and Peter Versteegen
Public Affairs specialist

The Ensley Engineer Yard in Memphis District gave the Dredge William A. Thompson (WAT) a major tune-up for its work on the Mississippi River this summer.

"We went to the engineer yard at Memphis for some hull repairs and as part of a five-year overhaul," said Larry Gromacki, chief engineer of the WAT.

The WAT was built in 1936 and christened in March 1937. The Thompson is the only Corps-owned and -operated cutterhead dredge, according to Ken Gardner, chief of Public Affairs for the St. Paul District.

The 1,370-ton dredge can carry up to 66 crew members. The WAT maintains some 683 miles on the Mississippi River, in the St. Paul, St. Louis, and Rock Island Districts. It also works 24 miles on the St. Croix River and 335 miles on the Illinois River.

The WAT arrived at the Ensley Engineer Yard (EEY) dry-dock early in December 1997 for major hull repairs by EEY's crew and normal seasonal maintenance by the Thompson's crew.

"The Mississippi River is frozen in Wisconsin (during the winter), so we had to come south to find a shipyard that could handle a job of this size," said Gromacki. "The Thompson is 60 years old and the hull had some thin spots. Ensley

was the only Corps facility big enough to handle the job."

It helped that EEY had previous experience repairing the WAT.

As Ensley learned from previous experience, the Thompson's hull is made of solid wrought iron, not steel plating as is common in ship building today. The affected areas of the hull had to be cut out and replaced with steel plating.

When the Thompson first came to Ensley's dry-dock in 1994, Terry Phifer and his welders consulted with industry experts on the best way to join the steel plating to the wrought-iron hull. Once they removed the old section of the hull, workers ground the edges of the hole to a slight bevel, then placed a thin bead from a high quality steel-welding rod along the beveled edge. They welded the replacement steel plate to this prepared edge for a strong bond.

Ensley officials completed the dry-dock work and the WAT disembarked EEY in early April.

With a minimum bridge-clearing elevation of 52 feet, 9 inches, Gromacki said that the Thompson must leave Memphis before high-water season in order to clear the bridges that span the Mississippi River and return to home-port in

Fountain City, Wis.

Memphis' high-water season normally lasts from March through May.

The WAT paused in St. Louis where high water interrupted its trip to Fountain City.

"We sat in St. Louis for a week because of high water," said Gromacki. "You can't get (the Thompson) under all the bridges during spring run off when the water is high."

The Thompson's dry-dock period at Ensley "provided an excellent opportunity for our two districts to work together with substantial cost savings over a commercial contractor," said Gromacki.

"It also provided our workers with another opportunity to showcase their skills and to maintain their versatility as a center of expertise for marine maintenance," said Ricky W. Shoaf, chief of Ensley's Shops Units.

Editor's note: The hull of the WAT incurred major damage on April 28 near Fort Madison, Iowa. The crew and a contractor successfully completed emergency repairs in the river on April 29. The WAT arrived in Memphis on May 5 to complete permanent repairs.

Workers in Memphis removed the old section of the hull, ground the edges of the hole to a slight bevel, then placed a thin bead from a high quality steel-welding rod along the beveled edge. They welded the replacement steel plate to this prepared edge for a strong bond.

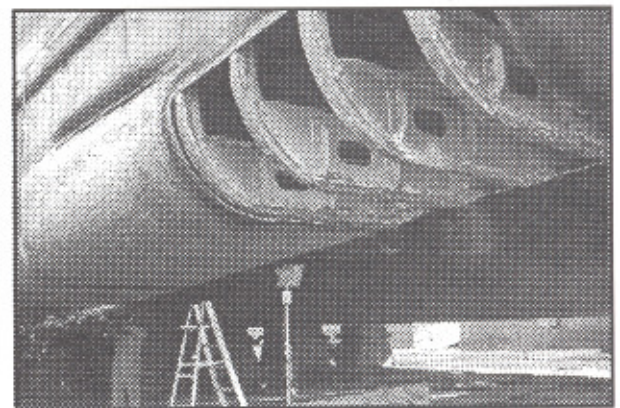


Photo courtesy Memphis District

Kruchten, cont. from page 3

Kruchten has contributed her editing skills to other projects, including nominations for Civil Servant of the Year.

"I was very surprised to be named Civil Servant of the Year. I edited a couple of nominations for other people, but never expected to receive it myself," said Kruchten.

After graduating from St. Cloud State University with a B.A. degree in English and history, Kruchten started working at the Corps. During her time with the Corps, she has seen many changes.

"When I started, you had to mark everything with a red pen on the paper. Now it's all on the computer. It's a lot more fun on the computer and proofreading is easier," said Kruchten.

When Kruchten is not working, she'd rather be traveling. She's been to Israel, England, Austria, Germany, Ireland, France, Switzerland and the Netherlands. She volunteers her time working on a hospitality team at St. Olaf Church. She also enjoys reading, going to plays, listening to classical music and going out for lunch with friends.

Strong ties, cont. from page 1

Solutions under discussion included a full levee project, diversion projects on both the Minnesota and North Dakota sides, and a combined diversion and levee project.

The district's partnership with officials, forged during the traumatic days leading up to the flooding of the two cities, continues today as the Corps of Engineers works closely with Grand Forks and East Grand Forks to provide protection against future floods.

Spychalla, cont. from page 3

River, Baldhill Dam, Homme Dam, Grafton, Grand Forks, West Fargo and Horace. He has also led studies on the Red Lake River, Wild Rice River, Pembina River, Two Rivers, Maple River and the Red River of the North.

"A nice accomplishment was the development and then the construction of the levees and flood diversions at Horace and West Fargo, part of the Sheyenne River Flood Control Project. It was one project that I was involved with from the very start to finish," said Spychalla. "It was especially gratifying to see these projects provide protection from the record floods in 1997."

Spychalla started out as a study manager in the Planning Branch of Engineering Division when he came to the Corps shortly after completing his degrees at the University of Wisconsin-Madison. He received his B.S. in civil engineering in 1967 and his Master's degree in 1967 in water resource management. He became a project manager in 1989 when the Programs and Project Management Division was first formed.

At home, Spychalla, his wife and children serve as international hosts for students and business professionals.

Spychalla and his family have also been active in the mission program sponsored by the their church. The program has sent Spychalla to Puerto Rico, Chile, and Sierra Leone on volunteer work teams at school construction projects.

Tapp, cont. from page 3

presentations to a variety of groups and classes about the Corps, how the Corps is maintaining a safe navigation channel and what the benefits are.

Tapp had a very active role in preparing the St. Paul District's award-winning Channel Maintenance Management Plan (CMMP) and the accompanying Environmental Impact Statement (EIS). The CMMP is a comprehensive long-term plan for channel and harbor maintenance activities in the district. It combines planning efforts from the late 70s and early 80s through current projects. Tapp immersed himself for about five years in the CMMP, which received the Chief of Engineers Honor Award this year.

"It has really paid off because the CMMP has been held as a model for other districts," said Tapp.

Tapp started as a co-op student in 1985 and worked as a park ranger at Lake Ashtabula and later at Cross Lake while attending Mankato State University. In 1987, he graduated from Mankato State University with a B.S. in resource management.

At the end of his busy workday, Tapp likes to go home and spend time with his wife, Lesli, and two children, Mackenzie and Connor.

"I've always had a very close family. It's something that's important to me and has helped me personally and professionally," said Tapp.

In his spare time, he also enjoys playing volleyball, basketball, and lifting weights.

• Revolutionize Effectiveness: Build the Team

Corps Awards Ceremony and Family Day set for June 19

By Joe Skupa
Construction Operations

Mark your calendar now for Friday, June 19, and plan to attend the "1998 Awards Ceremony and Family Day" at the Eau Galle Dam Recreation Area.

Eau Galle is located just north of Spring Valley, Wis., about 50 miles east of St. Paul. Operated by the St. Paul District, the facility provides flood protection, recreational opportunities and valuable habitat for native plants and animals. The Eau Galle project also has the Midwest's largest earthen dam.

The picnic will be held at the main day-use area, which offers a children's playground, volleyball courts, trails for hiking, horseshoe pits, a swimming beach and fishing areas.

The nearby Highland Ridge campground provides facilities for camping, hiking and access to a horse trail.

Not far from the recreation area is the local area tourist attraction, Crystal Caves.

There will be plenty of free parking and no vehicle entry fee. Although there is no plan for organizing a car-pool program, car-pooling is encouraged.

Numerous activities are planned this year for everyone. There will be children's games (Stephanie Dupey, 290-5375); volleyball (Lisa Hedin, 290-5431); golf (Dave Christenson, 290-5204); a cake walk (Julett Denton, 290-5366); and other family activities including a scavenger hunt, trivia contest and photo contest.

The entertainment committee is

currently seeking acts, such as skits, mimes, songs and dancers. This is your opportunity to dazzle your colleagues with your unusual, exceptional, or favorite talents! Contact Julett Denton, Joe Yanta at 290-5362, or Yvonne Berner at 290-5365.

Plenty of children's game prizes will be given away, and all children who attend are eligible to win.

Pop (regular and diet), popcorn and slush puppies will be provided for everyone.

This year's menu includes brats, hot dogs, hamburgers, a baked bean dish, pasta salad, chips, relishes and condiments.

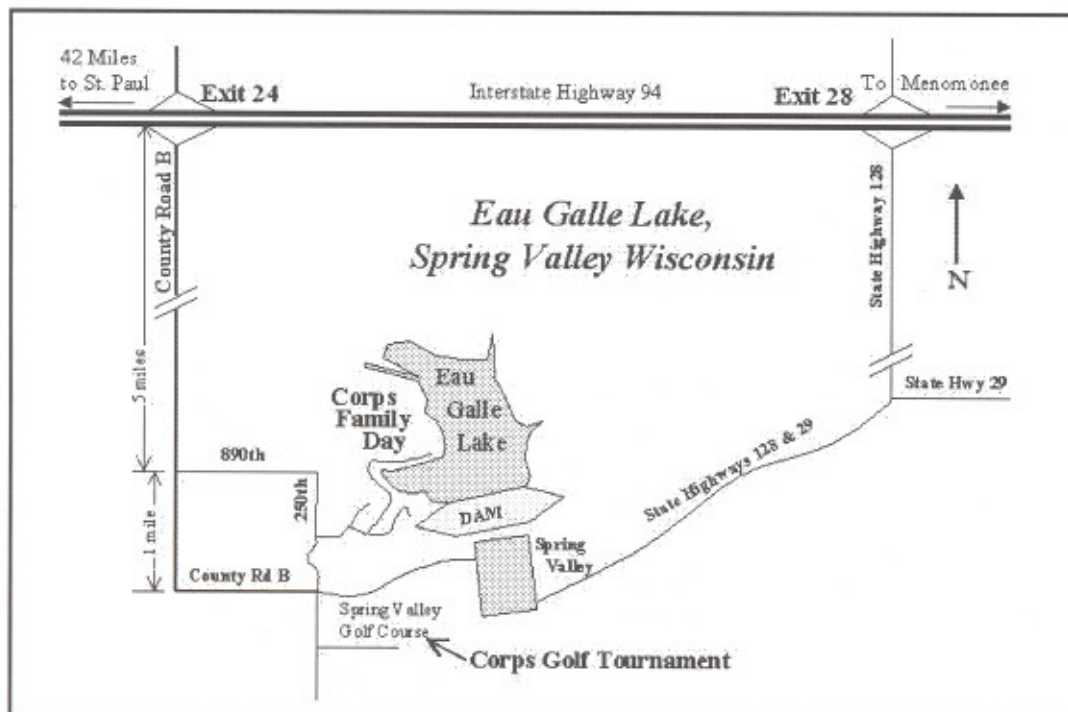
Meal ticket prices are \$4 for those age 11 and older, and \$3 for those 10 and under. Non-meal tickets are just \$2 for 11

and older, and younger kids get in free.

Tickets will be going on sale right after Memorial Day. The retirees' contact is Jan Graham at (612)290-5305, and field personnel contact is Jan Pream at (612)290-5312 to arrange for tickets.

Deaf interpretation will be provided for anyone requiring it. Be sure to contact Joe Skupa at 290-5661 by June 1, so that arrangements can be made.

Watch your e-mail, bulletin boards and flyers for further information.



St. Paul District graphic