



US Army Corps  
of Engineers  
St. Paul District

# Crosscurrents

Vol. 13 No. 6, June 1990

## Cameras, applause and gold shovels signal construction start on the Sheyenne River Project



Various officials participating in the Sheyenne Project ground breaking ceremony included (from left) Dave Haumersen (DD/PP), Bob Post (ED), Bill Goetz (CO), COL Baldwin (DE), Dave Sprynczynatyk (North Dakota State Engineer), State Representative Rodney Larson, Jake Gust ( North Dakota State Water Commission), Congressman Byron Dorgan, Jim McLaughlin and Fred Selberg (Southeast Cass Water Resource Board), Mayor Florenz Bjorson (West Fargo), Bill Spychalla (LCPM) and Robert Brodshaug (Southeast Cass Water Resource Board).

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## Bits and Pieces

**Lake Ashtabula Management Office** has joined a North Dakota tree planting program and the National "America the Beautiful" Program by committing to plant 50,000 trees in the next decade. Lake Manager **Steve Odgaard** attended a meeting with the Lieutenant Governor to pledge the Corps' contribution to the program at the lake. The trees will be part of the on-going wildlife management program, providing shelter and forage for various species. There is a great deal of public support for the tree planting program. Approximately 3,000 trees will be planted at Lake Ashtabula this year, with plans already underway for next year.

Lock & Dam 3 Major Rehabilitation Project has a new project engineer - **Captain Norman Boeman**. Boeman was formerly headquarters company commander of the 802nd Engineer Battalion in Korea, during a two-year tour. He has a civil engineering degree from Cleveland State University and is assigned to LD 3 for the next four years. Boeman and his wife Soonkeoung are celebrating the recent birth of their first child, Hannah.

**Dave Haumersen (DD/PP)** has gained the title of "Fellow" from the Society of American Military Engineers for his meritorious contribution and dedicated service. Haumersen has served on the post board for several years and was the post president in 1988-1989, when the post won all available awards and was labeled a 'home run post.'

On June 14th, the **United States Army celebrates its birthday** - the 215th anniversary of our Nation's oldest military service.

**Kevin Berg**, park ranger at Blackhawk Park, gave a water safety demonstration to 60 6<sup>th</sup> grade students in May.

**Steve Eggers (CO-R)** spoke to 100 4-8th graders at St. Patricks school in Hudson, Wisconsin, on Friday, April 20. Eggers' presentation, "Wetlands are not Wastelands" was part of the 20th anniversary of Earth Day.

**Mike O'Keefe (CO-R)** represented the Corps on Earth Day at the Brookdale Shopping Center with an exhibit. The exhibit photographically illustrated both traditional roles' of the Corps in navigation, lock and dam operation, dredging and recreation; as well as the more recent missions of EMP and regulatory issues.

**Howard Ecklund (CO-R)** presented a session on the Section 404 Permit Program at a prospect course at WES entitled *Wetland Development and Restoration in Inland Waterways*. Howard used examples from Minnesota permits to explain what is required in the permit process, and the coordination needed with other federal and state agencies.

The **District Water Safety Poster Contest** got under way April 9, 1990. The contest includes elementary 4th grade

students from schools around the various projects. From Lake Ashtabula approximately 150 4th graders were presented with the water safety message. Ranger **Barb LaPierre**, assisted by Ranger **Rich Schueneman**, presented each class with a program involving the importance and use of the P.F.D. (Personal Flotation Device.) Following the presentation, the boat safety movie "Judgment On the Water" was shown to the students. Then an over view of the water safety poster contest rules and regulations concluded the presentation.

Handouts, water safety fun facts and posters were distributed to each student and teacher. The first place posters entrants will join the entrants submitted from around the district where a grand prize winner will be selected.

A Message to the St. Paul District from **Jim Ruyak**:

*"Thanks for all your cards, calls, thoughts, and prayers during my visit to the hospital. That demonstration of caring is what the Corps is about. My recovery is progressing extremely well and I hope to be back among you by the end of June."*

**Marianne Price (EEO)** made two presentations in May on "How to get promoted in the federal government" at the World of Work seminar at Honeywell Plaza. Sponsored by the Division of Rehabilitation Services, Metro Regional Service for hearing impaired people, Human Resources Development Institute and Council of Honeywell Employees with Disabilities, the

seminar was targeted at deaf and hard of hearing individuals in the Twin Cities.

**District Relocation Update**  
Nine possible District relocation sites have been offered since an advertisement was placed.

**Tom Novak**, project manager, named the St. Paul buildings as follows: the **Hamm Building** (408 St. Peter St.), **Metro Square** (7th and Robert Sts.), the **Amhoist Building** (Fillmore and Robert Sts.), **CDC Building at Energy Park** (1450 Energy Park Drive), **Bandana Square** (near Energy Park), **Sibley Building** (4th and Sibley). Proposals for constructing new buildings were received for the **block of Smith and Chestnut** (roughly behind the Civic Center Inn) and a **block in the vicinity of the Amhoist Building** (near Robert Street, south of the river). A proposal was also received from the **Cray Building**, in Mendota Heights (near I-494 and Pilot Knob Road). This site is out of the St. Paul city limits.

The next step in the process is a market survey by GSA to determine if the sites meet evaluation criteria. This is an effort to determine the short list (approximately 3-4) of sites from whom we will actually solicit bids.

The Relocation Task Force is continuing to put together the special space requirements that were submitted by all office, division, branch and section chiefs.

A display with photographs of all potential district office sites will be in the Public Affairs display case on the 12th floor from June 22-28.

# Another partnership begins

St. Paul District and Southern Cass Watershed District celebrate construction start of \$8 million flood control project



About 75 people, including representatives of the St. Paul District, recently participated in the official ground-breaking ceremony for the Sheyenne River Flood Control Project. The ceremony, held on May 31 near West Fargo, North Dakota, marked the beginning of work on the West Fargo Diversion portion of the Sheyenne project.

Attending the festivities from the district were Colonel Roger Baldwin, district commander; Dave Haumersen, deputy district engineer for Project Management; Bill Goetz, chief of Construction-Operations; Bob Post, chief of Engineering; Bill Spychalla, project manager; Bob Penniman, engineer manager; Ralph Berger, Design Branch; Dick Sundberg, Fargo Office; and Ken Gardner, Public Affairs.

Following refreshments and brief comments by key participants at the West Fargo City Hall, the celebration moved to the site of the future diversion channel near West Fargo for the actual ground-breaking. There, more than a dozen representatives of the Corps, the state, the city and the local sponsor (the Southern Cass Watershed District) ventured into a planted field at the site of the future diversion channel which will route flood water around the city of West Fargo.

With gold-painted shovels in hand, the participants actively took to their task of turning shovelfuls of rich, dark dirt while cameras recorded the event and onlookers applauded. North Dakota Senator Quentin Burdick, Congressman Byron Dorgan, North Dakota State Engineer Dave Sprynczynatyk and West Fargo Mayor Florenz Bjornson also participated in the ceremonies.

**Above** Colonel Baldwin speaks with North Dakota State Water Commissioner Jake Gust and West Fargo Mayor Florenz Bjornson following the ceremonies. **Right** Bill Spychalla, life cycle project manager for the Sheyenne River Project, is interviewed by a Fargo television reporter following the ground-breaking.

## About the Project

The Sheyenne River Flood Control Project has four parts. A contract for \$8.8 million was recently awarded for the Riverside to West Fargo section, consisting primarily of a diversion channel and levees. The second part of the project will be the Horace to West Fargo diversion channel. The project's third stage involves raising the flood pool at Baldhill Dam. However, the status of this section of the project is in question because the Corps cannot find a willing local sponsor.

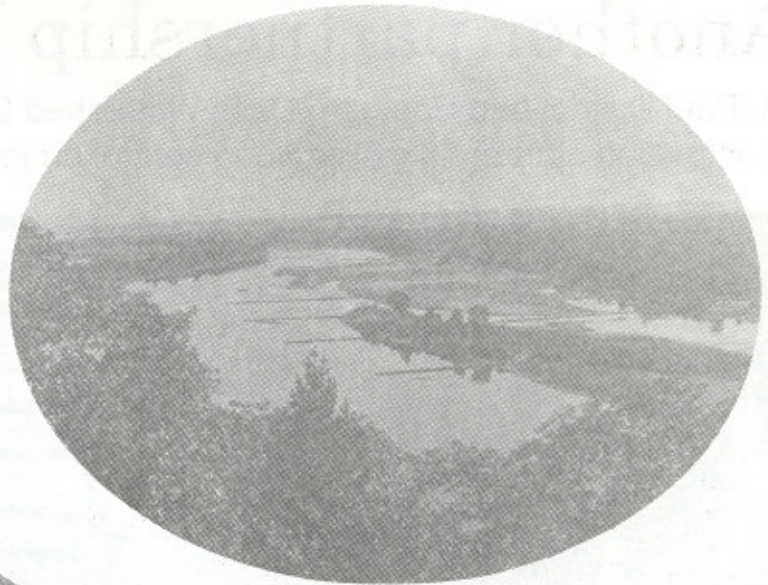
The final portion of the Sheyenne River project is a proposed dam on the Maple River. However, the dam was added to the project by Congress in authorizing the project and was not in the Corps' project proposal. The economics and feasibility of this stage are still being studied.

Story by Ken Gardner, Public Affairs



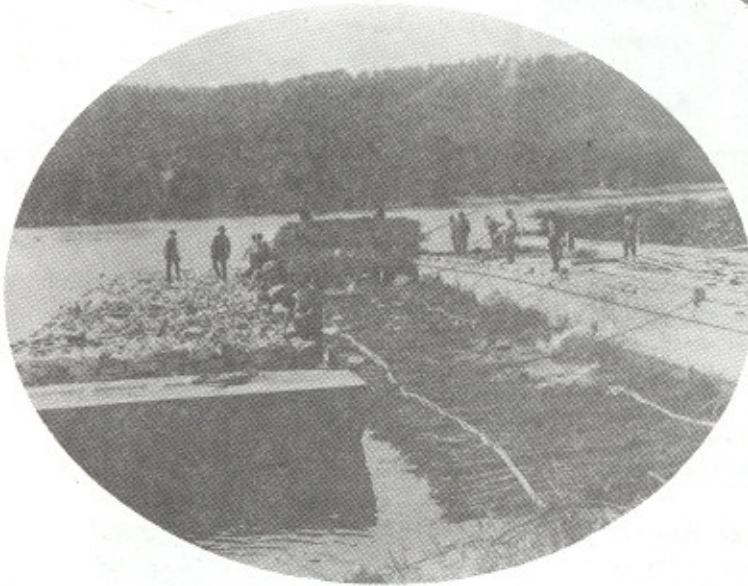
## Pics from the Past

A young major destined to become the Chief of Engineers in the early 1900's was responsible for a set of photographs taken along the Mississippi River between Minneapolis and St. Louis, Missouri between 1893 and 1895. Major Alexander Mackenzie "directed" the work of H. Bosse, draughtsman, to capture scenes of river towns, the different types of watercraft of the period and simple views along the river.



### Pine Bend, 1891

A photo of Pine Bend, 1891, showing wingdams used to maintain the 4 1/2 foot navigation channel. These wingdams guided the flow to a narrower channel, making it swifter and deeper.



### Wingdam construction, 1891

Wingdams were constructed by placing mats of willow branches in the water and then covering them with a layer of rocks until the mat sank, followed by more layers of willow and rock. While most wingdams are still in place, many became submerged with the completion of the nine-foot channel.

The nearly 100 year old book of 156 cyanotype photographs was recently turned over to district historian John Anfinson by the crew of the dredge *Thompson*. It is only a guess that they were given to William A. Thompson during his years in the district (1878-1925) by Mackenzie or that Thompson was in some position to have gotten possession of them. The book itself was actually donated to the dredge by Mrs. Thompson about 55 years ago. The actual value of the cyanotypes is unknown, but could range in the tens of thousands of dollars, due to the limited number of known copies.

These photos were printed from copy negatives made by Lyle Nicklay, former district photographer. Larger prints of the entire book may be seen by calling Public Affairs.



## Engineering Division responds to District needs with office reorganization

By Dale Mazar, Chief, Engineering Management Branch  
and Joan Guilfoyle, Public Affairs

In order to meet requirements of new regulations and to increase efficiency and effectiveness of work efforts, significant reorganization of the Engineering Division (ED) occurred in 1989. The Project Management Branch became Engineering Management Branch and was reorganized into three Sections, Civil Works, O&M/Military and Contract & Administration. The Civil Works Section is responsible for engineering management of all products for civil works projects. The O&M and Military Section is responsible for engineering management of all O&M and military projects. The Contract and Administration Section now handles all Architect/Engineering contract administration and administrative support for the branch. This consolidates the majority of contract administration experience in one section, resulting in more efficient use of training dollars.

In addition to these changes, an entirely new branch in ED, Cost Engineering, was also established.

The reorganization of the Project Management Branch into the Engineering Management Branch (ED-M) was accomplished basically to support the life cycle project management (LCPM) concept and to improve efficiency and effectiveness in ED. Management duties of projects that meet certain criteria (those with project costs over \$10 million and/or with environmental or political sensitivity) were moved into LCPM. There, life cycle project managers are responsible for overall project coordination/communication with non-Corps entities, including local sponsors, state agencies and the public, overall project scheduling and overall project budgeting and program management. The Programs Management Office recently became a branch under LCPM to more effectively accomplish the latter. At present, LCPM projects include Baldhill Dam Safety, Bassett Creek, Chaska, Rochester, St. Paul, Sheyenne, State Road and Souris River.

Some project management responsibilities remained in ED-M, primarily for

projects of a lesser dollar amount and for the major maintenance and rehabilitation work on the locks and dam system, the Defense Environmental Restoration Program, Superfund and Dam Safety programs. To provide engineering support to LCPM, a new position of "engineer manager" was created in ED-M. These positions combine the remaining engineering responsibilities in ED-M, and the majority of project engineer duties formerly accomplished in Design Branch of ED. This allows direct product support to the life cycle project manager and greater effectiveness for management of projects in ED.

The formation of the Cost Engineering Branch was another major change in ED. The cost engineering function had previously been accomplished within the Specifications and Estimating Section of the Design Branch. Because of the added emphasis on cost engineering, this function was elevated to branch status. The branch is tasked with preparing all planning, design and construction level cost estimates within the District, except for modification estimates under \$25,000.

Included in the Cost Engineering Branch's responsibility is the preparation of baseline construction cost estimates for all projects using the M-CASES (Computer Aided Cost Estimating System) method. An M-CASES baseline estimate is a very detailed estimate of a project's costs including construction, engineering and design, real estate, supervision and administration costs for both the Federal and non-Federal portions; and is used for all projects that have a local sponsor that will share costs.

The level of detail required often means that the final reports are massive. For example, the hard copy of the baseline cost estimate for the Rochester Flood Control Project measured over two feet thick and established a total project cost in excess of \$100,000,000. It's clear that there is a tremendous difference in using a computer system for cost estimating over the old pencil-in-hand method.

## John Blackstone wins Outstanding Toastmaster Award

John Blackstone, Engineer Manager in the St. Paul District, has been named Outstanding Toastmaster of 1989 by the Heritage Toastmasters Club. John recently completed all the require-



ments for Distinguished Toastmaster, the first in the Heritage Club to do so, and is working toward a new goal, the ATM Silver (Able Toastmaster).

Over the last eleven years, John has held many offices in the Heritage Club, including that of President. He has also been very active beyond the club level and has served as the Area 11 and Eastern Division Lieutenant Governor. In addition to his involvement in Heritage, John has also been active in two other Toastmaster's Clubs. He has been working with a low member club, Fullerspirits, for approximately four years and during 1989 he helped to form the new St. Paul Employees Club.

John's community activities include a three-year term on the Board of Unity Church, Unitarian, where he is currently Corporate Secretary. John is also a member of the American Society of Professional Engineers and the Minnesota Society of Professional Engineers, where he served as the Chairman of the College and Education Relations Committee.

During 1989, John conducted a Youth Leadership program for a Junior Achievement group in Edina, MN and sponsored six new Toastmaster's members in 1989.

Formerly a hydraulic engineer in the District office, John now coordinates the design of water resources projects in his capacity as Engineer Manager. Prior to joining the Corps in 1977 John served in Korea as an electronics technician with the Second Infantry Division of the Eighth Army. He graduated from the University of Minnesota in 1976 with a degree in Civil Engineering.

# Lock and Dam System is winning subject for grade school science fairs

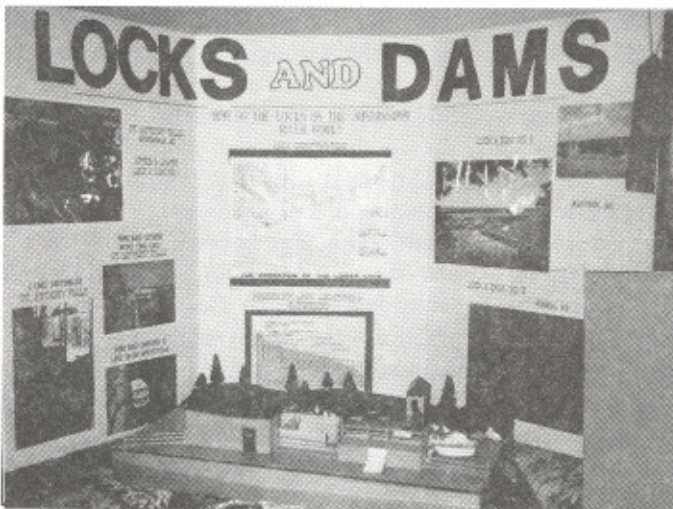
Science Fairs are common at Minnesota schools in the spring. Some fairs are held for all grades, while others feature science projects for only 5th and 6th graders. Some students are required to do these projects, making the competition stiffer, while for others, it's an elective.

It's a great opportunity for students to learn. They must first select an interesting topic and develop a project that demonstrates or illustrates a scientific problem, law or principle. Their topic may include collection, demonstrations and/or research.

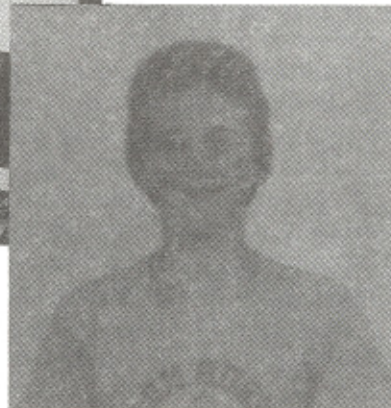
They will need to gather information by reading, experimenting, talking with adults and observing and taking notes. They will need to construct a display of a certain size and include models and written materials to describe the project and findings.

Finally, they will be interviewed about their project and need to be able to show good communication skills.

Three Minnesota students, inspired by visits to St. Paul District lock and dams, won ribbons for science projects in local and district science fairs in March and April. These young people are to be commended for their fine work.

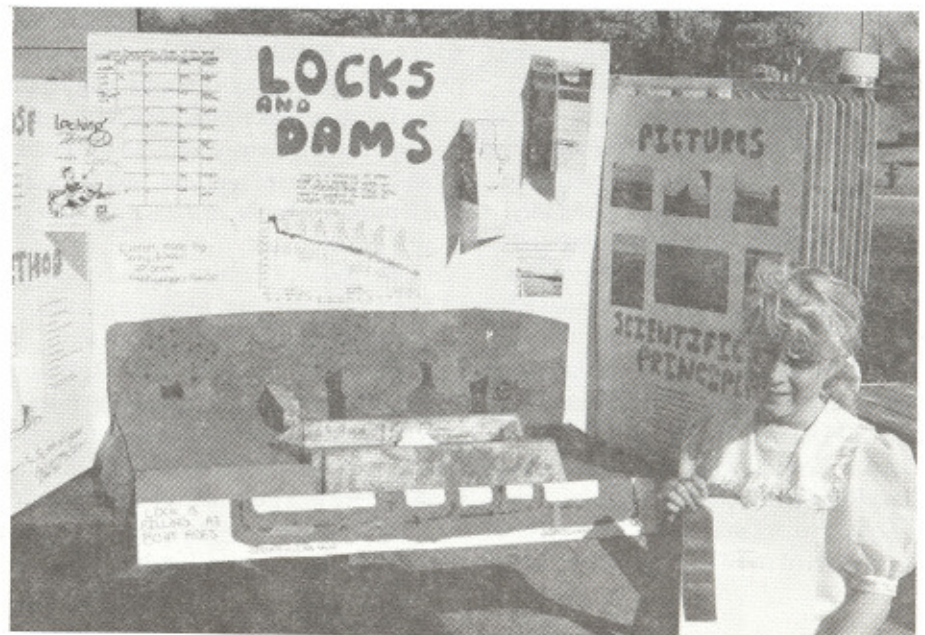


Seventh grader Chad Rosenberg of rural Fairmont, was a winner in the Ceylon Public School science fair and was chosen to enter his exhibit in the regional fair in Mankato, where he placed second.

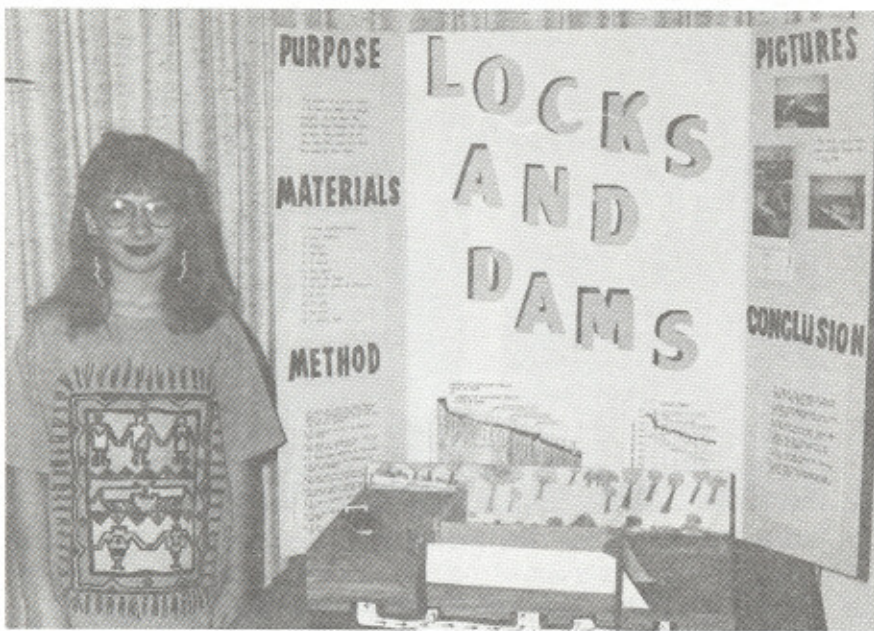


Chad took his own photos for his project. He was challenged by the need to build a multi-level lock that would hold water. He solved this problem by cutting off one end of a plastic silverware utensil holder and using oil clay to make the divisions waterproof. Paper mache on the outside finished the job.

Brent Johnson, budget analyst in Programs Management Branch, was doubly proud of his daughter Jennifer. A 6th grader at Turtle Lake Elementary School, Jennifer was required to enter a project. She won a top prize and was one of six out of 120 invited to show her project in the Moundview District Science Fair. Her model focused on the locks and how gravity is needed for their operation.



Story by Bonnie Ellis,  
Public Affairs



Carlie Thompson of Ellendale, and 5th grader at Glendale-Geneva Elementary School, thought her visit to Lock and Dam #1 was "neat". She was impressed with how the system worked and built a model to illustrate her display. The judges at her school were impressed also and awarded her a blue ribbon.

## Ever looked inside the nozzle of a fire extinguisher? Be careful and bring insect repellent!

Story by Jeff Kleinert, Park Manager, Pokegama Lake  
and Joan Guilfoyle, Public Affairs

When was the last time you looked closely at a fire extinguisher or even held one? How many of us have ever discharged one? Since discharging incurs a cost for recharging, most of us have perhaps never really used an extinguisher; or, if we have, it was probably in a stressful situation. Anyone who has been in a fire already knows the value and necessity of fire extinguisher safety and reliability.

For those of us whose experience has been more remote, it's important to remember that your safety and perhaps life may depend on an extinguisher that works properly. If you have one in your home, it should be taken in for professional testing and a major overhaul every 6 years. Monthly checks for an adequate charge are also highly recommended; and as the following experience of Jeff Kleinert demonstrates, checking for other "obstructions" is a good idea as well.

During a normal monthly inspection of fire extinguishers at Pokegama Lake, Park Manager Jeff Kleinert noticed that many had not had an overhaul for quite some time. This is different from a simple

recharge; an overhaul means taking the unit completely apart for cleaning and recharging. The cost difference between an overhaul and the purchase of a new unit is also quite substantial; \$35.00 for a new one compared to \$6.00 for an overhaul. When the newly overhauled extinguishers were returned, the vendor remarked to Jeff that 5 of the 19 units had had mud packed in the nozzle. Since extinguishers are not handled except during emergencies or maintenance, the source of the mud was a mystery, but not for long. It turned out to be mud dauber wasps.

These wasps collect mud in nearby puddles and proceed to build a hollow tube nest in which they pack dead spiders and lay one egg. When the egg hatches, the young wasp has a convenient food supply of spiders to nourish it. The dark, inverted nozzle of a fire extinguisher is the perfect spot to raise wasps, or so the wasps have found.

If the location of your fire extinguisher lends easy access to flying insects, you may have this problem, too. Jeff recommends NOT sticking your finger in the nozzle or peering inside.

He suggests tapping the nozzle to see if anyone is home. If not, take a wrench and unscrew the small nozzle from the extinguisher (it is about 2 inches long and made of plastic or metal, one-half inch in diameter). Unscrewing this small nozzle will not discharge the unit. **DO NOT UNSCREW THE ENTIRE FIRING ASSEMBLY FROM THE RED CANISTER!** This will allow you to inspect both the nozzle and the opening left visible on the unit. If you find any mud, take the unit to a dealer for a thorough cleaning. If you have any questions about this or other safety issues, call Ron Scott, Safety Officer at x501, or check the Safety Manual EM 385-1-1, Appendix L. Jeff Kleinert would be happy to answer any questions as well (218/326-6128). There is another publication from the Army Safety Center that can provide useful information, "Fire Extinguishers - Principles and Operations and a Treatise on Extinguishing Agents" or "Everything You Always Wanted to Ask About Fire Extinguishers But Were Afraid You Would Sound Stupid If You Asked".

## EEO Awards for 1989 Announced

Each year, a number of employees are nominated to receive the Commander's Award for Equal Employment Opportunity. Over the last year, these folks have demonstrated their commitment and support of the EEO Program.

### Mary Street

As the personnel staffing specialist in the Personnel Office solely responsible for recruitment and hiring of the District's student programs, Mary has worked diligently to recruit minority students under the Stay-in-School, Summer Hire, Summer Aid and Federal Junior Fellowship programs. She also supports EEO through her attendance at Special Emphasis programs and through active counseling of supervisors and student employees in dealings with minority and female students.

### Greg Frankosky

Frank has made several strides toward EEO goals in the Design Section of Engineering Division in his capacity as chief of the Structural Engineers Section. Through promotions and selections of women and minorities, and active supervisory support of Bruce Brand's collateral assignment as manager of the Federal Women's Program, Frank has conscientiously applied the principles and practices of EEO.

### Tom Oksness

During 1989, Tom spearheaded an effort to establish an Upward Mobility Program at the locks and dams, that enabled women to compete for lock operator positions. The majority of these positions were subsequently filled by the under-represented female population in the lock and dam career field. One of these women has since become a lock operator. It became apparent that attitudes of lock and dam managers toward females in the profession have changed when one lockmaster openly stated that training personnel proficient in administrative skills was as easy or easier than training blue collar applicants. Tom has also served on the Federal Women's Committee for the last two years, with participation on two subcommittees.



Deb Foley (second from left) proudly receives the annual Tudor Award at the national convention of the Society of American Military Engineers. The Tudor is offered to a civilian engineer member who has made outstanding contributions to the field of engineering. Deb was the first winner from both the District and the Minneapolis/St. Paul Post. Standing with her is Colonel Roger Baldwin, St. Paul District Commander (left) and two former St. Paul District Engineers, retired Generals Max Noah ('74-'76) and Forest Gay ('76-'79).

### Steve Adamski

Steve has been a diligent advocate for building accessibility by assessing the District's needs, investigating possibilities and recommending alternative solutions. He was instrumental in the District's procurement of emergency evacuation chairs for the mobility impaired. Steve's outstanding efforts have resulted in an increased awareness and acceptance on the part of others and supports true equality in District employment opportunities for the physically handicapped and mobility impaired.

### Lou Kowalski

Lou's strong support for EEO has created a positive climate among Planning Division (PD) personnel concerning affirmative action and the District's EEO Program. PD continues to lead the District in percentage of female employees and in attendance at the annual Cultural Diversity Week program. Lou also supports professional development opportunities for women, selecting women for long-term training for the last two years, as well as creating several upward mobility positions in the Division.



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## Crosscurrents

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