



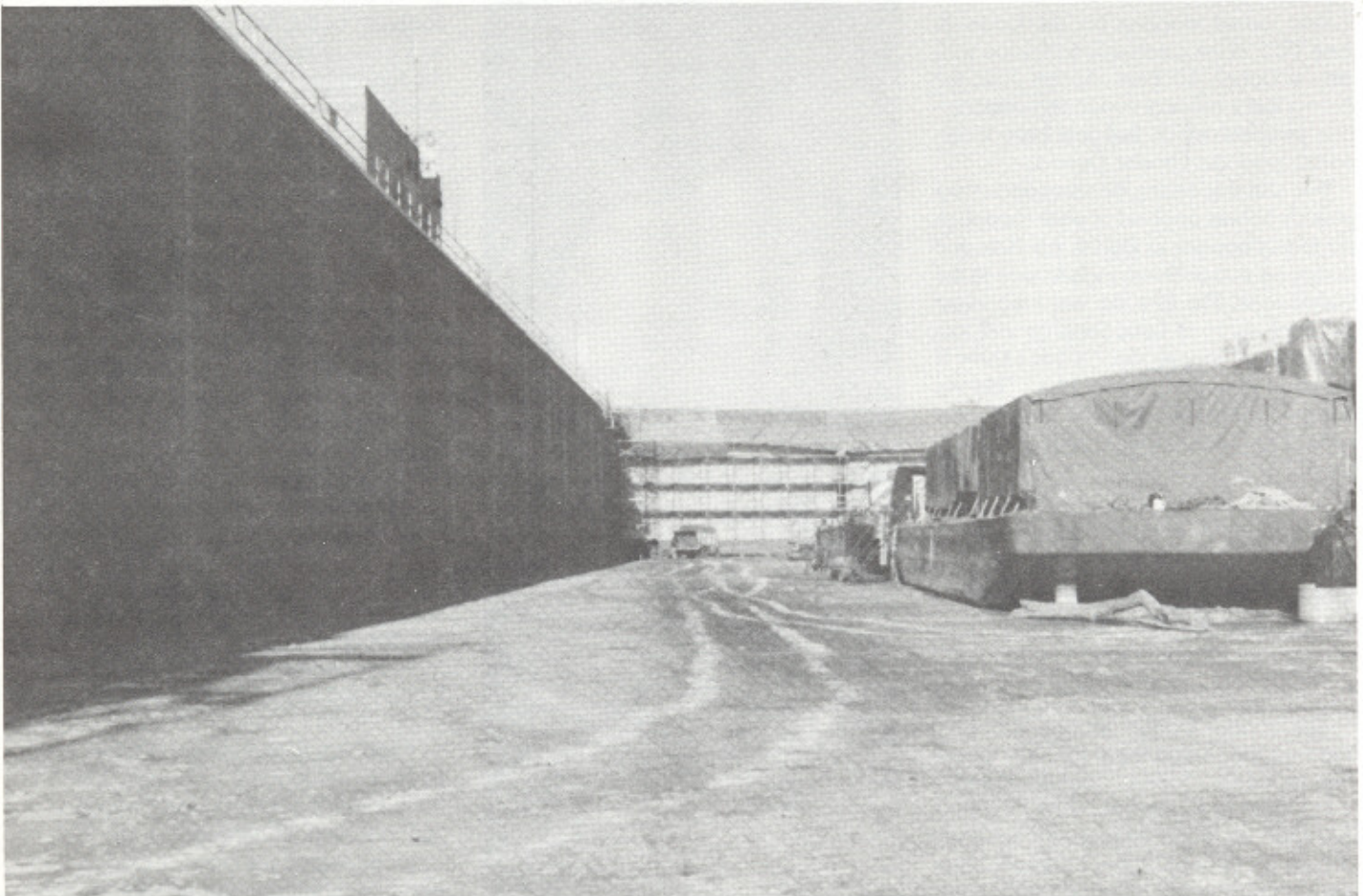
**US Army Corps  
of Engineers**

St. Paul District

# Crosscurrents

Vol. 10 No. 2

February, 1987



Lock and Dam No. 2 was dewatered in early December to begin stage one of the major rehabilitation work on the lock. Stage two of

the rehabilitation program for no. 2 will begin next winter. Locks and dams 3 through 10 are tentatively scheduled for similar work over the

next ten years. The story on Lock and Dam No. 2 starts on page 4.

## Bob Post becomes new Engineering chief

Bob Post has been named chief of the Engineering Division for the St. Paul District, replacing Pete Fischer who retired in early January.

Bob is a graduate of the University of Iowa where he earned a civil engineering degree in 1966 and a master's degree in civil engineering with emphasis on water resources in 1967. A native of Dubuque, Iowa, he is also a graduate of Loras College in Dubuque where he earned a bachelor's degree in philosophy in 1964.

He joined the St. Paul District in 1967 and has held a number of key positions in-

cluding chief, Environmental Resources Branch; assistant chief of Planning Division; and assistant chief of Engineering Division since January 1984, the position he held prior to being selected for his new assignment.

Bob is registered as a professional engineer in Wisconsin and is a member of Chi Epsilon and Tau Beta Pi, both honorary engineering societies, the American Society of Civil Engineers and the Society of the American Military Engineers.

Bob and his wife, Diane, live near Hastings, Minn. with their three children.

*Photo by Denise Yale*



**Bob Post settles into his new office as chief of engineering.**

## Pete Fischer retires from district

Pete Fischer, chief of engineering since 1980, retired January 2. Pete worked for the district for over 31 years and during that time held a succession of positions including chief, Hydraulics Branch; chief, Geotechnical, Hydraulics and Hydrologic Engineering Branch; and assistant chief, Engineering Division.

Pete started working for the Corps in June 1955 in the construction division with duty at Duluth Air Base. At that time, the district had a military design and construction program which had just been transferred from the Omaha District.

Pete said that among the more interesting projects he was involved in were the design for family housing at Duluth Air Base and design for two different missile sites in the Duluth area. The first site was built along the north shore of Lake Superior and was a "Bomarc" missile site. "I don't know if the thing ever flew," Pete said, "but we designed a large facility for it. I don't even know if any missiles were delivered to the site."

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*"It turned out that the construction of the site was set up to fool the Russians. . ."*

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The second missile project was even more unique. According to Pete, the missile was called the "Goose" and construction was started in the swamps north of Duluth Air Base. A huge complex was designed and half of the project was completed when the construction was halted and the site was abandoned. "The missile didn't exist," Pete said. "It turned out that the design and construction of the site was set up to fool the Russians into believing that we had an inter-continental ballistic missile. The main objective was to buy time."

Pete was also involved with civil works projects early in his career and worked on the early design memorandums and feasibility studies for the Mankato project. The district was ready to start construction at Mankato before 1960 when the local people decided that they couldn't afford the project and did not sign the local cooperative agreement. The project was shelved and wasn't reactivated until after the 1965 flood. "It's a project that spanned my whole career," Pete said. "During the time that we worked on Mankato, we actually designed and built a number of other projects." These projects included St. Paul, South St. Paul, Guttenberg, Rushford, Fargo, Winona, dams at Eau Galle and Big



Pete Fischer cuts the cake that was presented to him the week that he retired. The cake was decorated to look like Baldhill Dam.

Stone-Whetstone and a number of small projects.

One of the non-project issues that Pete was involved in was the growing environmental concerns in the early 1970's. "We had a lot of difficulty in planning and engineering, first accepting the idea of the environmental perspectives and then organizing and staffing the organization in a way that we could effectively accommodate and incorporate the concerns into our projects," Pete said. One of his primary tasks was to mediate the conflicts between the people in the Environmental Branch and the project managers in both planning and design.

Another issue that he dealt with came in 1982 when planning and engineering

became separate divisions. "Corpswide, the engineers viewed it as a fragmentation of the engineering function and it was a pretty traumatic experience," Pete said.

As chief of Engineering, Pete explained that a chief worries about more than just ongoing projects. "We have to know if the division is going to be able to do its job effectively in the future. Are we recruiting and training people so that they will have the capabilities to do the job five years from now? Are we capable today to do whatever our customers ask us to do five years from now? You start worrying about more than just the day to day activities involved in getting the job done on time."

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*"Mankato is a project that spanned my whole career."*

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On looking back, Pete says that things have gone well and there have been few disappointments. A few things that he feels he is leaving unfinished are fully integrating the project management concept into engineering, which would increase quality assurance and increased employee recognition. "We have not done as good a job as we should have taking care of all the staff and administrative people who are as equally important as engineers in getting our job done."

When Pete started working for the Corps, he set a goal to retire in January 1987. "I don't know if setting the goal was good or bad, but nothing happened in the past 32 years to change my mind. I made a decision a long time ago that it would be much more effective to move around at the end of my career than at the start of it. I gave up certain benefits by doing that, but now that I am financially secure, I can sit back and do just about anything I want."

The future holds some part time work that includes working as an advisor on the efficiency review team that will be studying the engineering function in the Corps. Another possible job will be working with a consulting firm from New Orleans that is submitting a proposal to the Vicksburg District to prepare designs, plans and specs for lock-work on the Red River Waterway in Louisiana.

Pete was born in St. Paul and presently lives in Maplewood, Minn. with his wife, Lorraine and three of their five children. Pete said that his wife wasn't sure how things would work with him being home now, but she said that if it gets too bad, he can always get a job at the corner hardware store.

## Preparing now for '87 taxes

By Donna Bolinger  
American Forces Information Service

"What?!! Prepare now for my 1987 Taxes?!!"

An understandable response, especially because you still have until April 15 to file your 1986 tax return.

But the complexities of the new tax law, which will apply to your 1987 tax returns, make early planning a must. In fact, IRS officials say the sooner in 1987 you start preparing, the better. Here's a rundown on some of the changes you can plan around.

### Itemizing Deductions

Under the new tax law, you won't be able to claim charitable contributions as a deduction unless you itemize on your return. And in some states, you can't itemize your state income tax return if you don't itemize on your federal return.

But the law is expected to result in fewer people itemizing deductions. Qualifying for them will be more difficult than in the past because the new law reduces or eliminates many expenses you may have in the past.

So if you plan to itemize, a detailed record of deductible expenses, complete with receipts, is a must.

State and local sales taxes will no longer be deductible, and personal interest deductions—the cost of interest paid on car loans, credit cards and personal loans—are being phased out. In 1987, you'll be able to claim only 65 percent of these interest expenses. That amount will drop to 40 percent in 1988, to 20 percent in 1989 and to

10 percent in 1990. After 1990, mortgage interest on your principal residence and a second residence, with some limitations, will be deductible interest expenses.

Only those medical and dental expenses that exceed 7.5 percent of your adjusted income can be deducted beginning in 1987.

And the new law allows you to claim some miscellaneous itemized deductions, but only if they exceed 2 percent of your adjusted income. These include expenses for subscriptions to professional publications, out-of-pocket TDY costs and other unreimbursed business expenses.

The moving expense deduction is not subject to this 2 percent floor.

### IRA Contributions

Individual Retirement Accounts remain good long-term retirement plans. But if you contribute to an IRA for its attraction as a tax deduction, you might want to consider if it's still the best investment for you.

Because all military people and government employees participate in employer-maintained retirement plans, they're subject to a tax law change that affects the way IRAs are claimed as deductions.

Under the new tax law, a single filer participating in an employer-maintained retirement plan can't take an IRA deduction if his adjusted gross income (total income less allowable adjustments) is 35,000 or more. A married couple filing a joint return can't claim an IRA deduction if their combined income is 50,000 or more.

Although an IRA deduction may not be allowable, you can still make non-

deductible contributions to an IRA. Taxes on interest earned will continue to be deferred until funds are withdrawn from the account.

### New W-4 Required

If you've been declaring extra exemptions to improve your cash flow throughout the year, you'd be wise to calculate your expected tax liability as soon as possible, using the 1987 Form W-4. This will ensure you're paying at least the minimum required amount of your expected tax bill during the year.

Under the old tax law, if you didn't prepay at least 80 percent of your tax bill during the year, you were subject to a penalty. The new law imposes a penalty if you don't prepay at least 90 percent of your tax bill during the year.

Whether you chose to change your number of exemptions or not, contact Jan Wallace, personnel office, ext. 7516 to update your Form W-4 as early in the year as possible. The law requires you to do so by Oct. 1, 1987.

### Social Security Numbers

If you have children you claim as exemptions on your tax returns, you'll be wise to apply now for social security numbers for any who don't already have them. The 1987 tax return will require social security numbers for all dependent children claimed on your return who will reach age 5 by Dec. 31, 1987.

Your personnel office can help you to apply to the Social Security Administration, using a Form SS-5.

## Going, going, gone...

The St. Paul District has a lot of "losers".

Since Weight Watchers was initiated by the Feds for Fitness program in May 1986, the combined weight lose is close to 900 pounds! More than 35 employees have gone through the program with several reaching their goal weight. The program has become so successful that some employees from the Post Office and the IRS have started to attend.

The following list includes some of the biggest "losers" who have gone through the program and how much weight they have lost:

—Mary Barbo (74), Jan Pream (42), Jody Rooney (25), and Mary Kay Linder (23).

The next Weight Watchers group is scheduled to start on March 17. For more information about the program, contact Jan Chapman at ext. 7666.



Mary Barbo, Contracts Branch, tops the list of "losers". During the time that she was on the Weight Watcher's program, she lost 74 pounds. She is now a lifetime member.

## Corps Calendar

Feb 16 Federal Holiday  
Washington's Birthday

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## Project Update

# Lock and Dam No. 2 rehab

By Denise Yale  
Public Affairs Office

When the lock at Lock and Dam No. 2 was dewatered in early December, it was the first lock work project for the major rehabilitation of locks and dams 2 through 10 in the St. Paul District.

"Locks and dams 2 through 10 are about 50 years old, which is the length of time that they were designed for," John Bailen, project manager said. "The purpose of the Major Rehabilitation/Maintenance Program is to extend their life another 50 years." The estimated \$120 million program includes major repair work and installation of new machinery and will take over ten years to finish. The program is funded from operations and maintenance (O&M) appropriations.

Stage one of the lock rehabilitation being done at Lock and Dam No. 2 includes repairing concrete joints and walls, refurbishing the miter gates and tainter valves, installing a stainless steel bubbler system to help keep the gates free of ice and testing for any voids under the lock floor and filling them.

The work is expected to be finished in time for the spring barge traffic. "So far, we are ahead of schedule," said Craig Hinton, Mississippi River Section. "The weather has been a big help by limiting ice buildup and speeding up concrete repair. The only problem with the milder weather is that the towboat traffic may start up early."

Both stages of the lock rehabilitation will be similar for locks and dams 2 through 10. Stage two of the lock rehabilitation includes:

- Replacement of the miter gate machinery which opens and closes the lock gates.

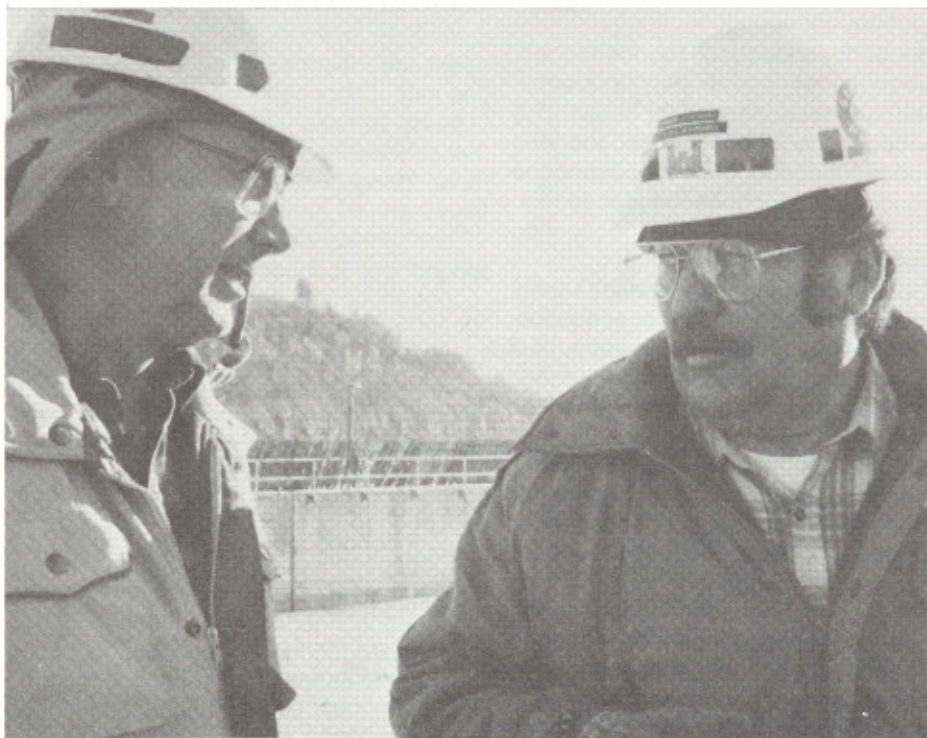
- Replacement of the tainter valve machinery which opens and closes ports in the lock wall to raise and lower the water level in the lock.

- Replacement of the electrical control systems.

- Replacement or rehabilitation of the central control station.

Common features for work on the dams include:

- Replacement of the electrical system.
- Concrete and structural repairs.
- Replacement or repair of the chains which lift the dam roller and tainter gates.



Craig Hinton (left) and Arnie Wodarz, Rivers and Harbors maintenance foreman, discuss the progress of the rehabilitation of the lock.

The work is ahead of schedule due to the good weather in January.



The miter gates of the lock are raised on jacks to enable workers to do repair work. The

repair work on the gates includes sandblasting and painting.

—Strengthening or raising the earth dikes near the locks.

“Some locks and dams have special work that needs to be done,” John said. At locks and dams 2, 4 and 5, the hoist car systems that are used to adjust the tainter gates will be replaced. The plans call for each gate to be motorized. The current system involves moving a hoist car above the gate to be moved and manually attaching the heavy gate chains to the hoist car machinery. “This can be very time consuming and potentially hazardous,” John said.

At Lock and Dam No. 2, the service bridge above the dam will be raised ten feet. “This will allow the gates to be raised higher to flush more ice and debris through the dam,” John said. “The buildup of ice and debris during high flows causes higher pool elevations upstream of the dam and threatens the integrity of the dam itself.”

The dam at no. 2 is currently undergoing scour repair. Sand from the bottom of the river has been scouring both the upstream and downstream side of the dam for the last 40 years. In some cases there are holes up to 50 feet deep and these threaten the stability of the dam. About 100,000 tons of rock will be placed along the slopes of the scour holes to prevent further erosion.

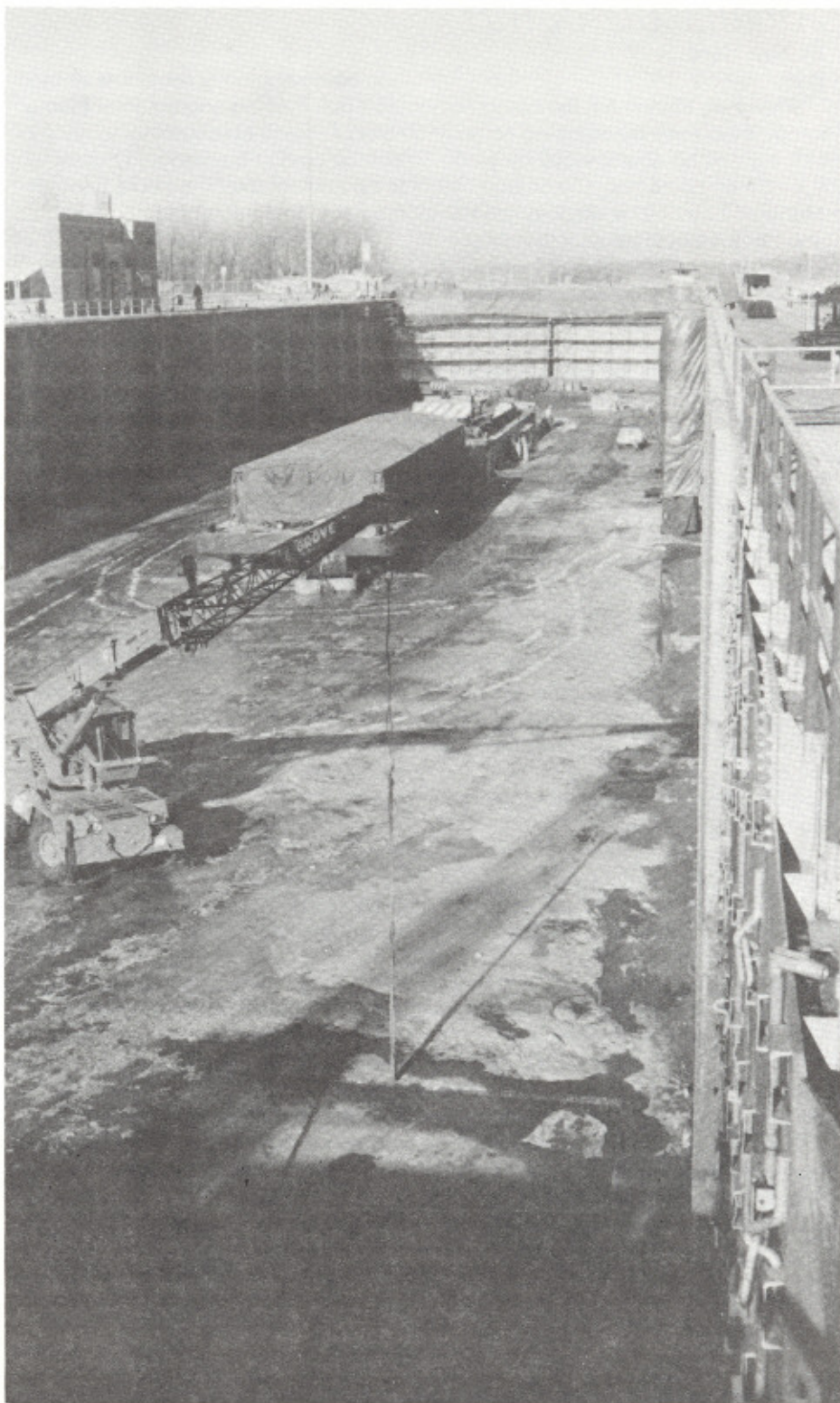
At Lock and Dam No. 3, there is a serious outdraft problem where the currents tend to take tows toward the dam. “The most practical structural solution is a 1,300 foot-long rock dike upstream of the lock and dam,” John said.

Lock and Dam No. 3 is scheduled for stage one of the lock rehabilitation work next winter. Stage two for Lock and Dam No. 2 will also begin next winter.

## EIS schedule for lock and dam rehab announced

CHICAGO—The U.S. Army Corps of Engineers announced its schedule for the completion of an Environmental Impact Statement (EIS) which addresses potential cumulative impacts of its nearly 300 million major rehabilitation of the locks and dams on the Upper Mississippi River and Illinois Waterway.

The EIS is scheduled for completion by the end of 1988 and will cover those features of the rehabilitation work which may allow an increase in commercial navigation traffic, resulting in the potential for cumulative impacts on the Waterways. The purpose of the major rehabilitation work is to insure the continued safe and efficient use



Lock and Dam No. 2 is the first lock work project under the Major Rehabilitation/Maintenance program. The total

rehabilitation program will cost an estimated \$120 million and will take over ten years to complete.

*Photos by Denise Yale*

of the thirty-four locks and dams, many of which are more than 50 years old.

The Corps is scheduled to distribute a draft of the EIS to the public in the spring of 1988. In addition, the Corps is completing separate environmental assessments for each particular lock and dam. These assessments address that portion of the

work that is not expected to significantly impact the waterway.

The Corps began its major rehabilitation effort in 1977 and is now about 50% complete.

## Around the district

By Ken Gardner

Public Affairs Office

When **Pete Fischer** left the district last month, I was fortunate enough to get hold of a copy of his almost-scholarly work, "A Compilation of Corollaries to Murphy's Law." This single-paged volume lists a dozen of the most thought-provoking insights into how the real world actually operates. They were gathered and compiled by Pete over his 30-year-plus Corps career.

You all remember the basic law according to Murphy: "Nothing is as easy as it looks; Everything takes longer than you expect; And if anything can go wrong, it will at the worst possible moment."

Pete's collection starts with a basic premise that all should heed: "Murphy's Law is active without exception." His list ends a little more on the philosophical side: "No one in the entire world thinks exactly as I do, and we are all right."

In between, the list covers the world ("The world is not as it seems to be."), intelligence ("We are not as smart as we think we are, but others are smarter than we expect"), and the bureaucracy ("You and I are bound by regulations; 'they' can do anything they want"). The subject of truth gets special attention ("The 'truth' is what the other person perceives it to be; the 'facts' are what a third party discovers" and "Beware of questions starting: 'Isn't it true that . . .'").

Words to live by.

Now we can move on to the really important things. Like people.

The newest "green-suiter" in the district is **Major Chuck Rogers** who is now working in Project Management (ED-M). Chuck just completed long-term training in Tallahassee, Fla. where it was nearly 100 degrees when he left there in December.

In other engineering news, new division chief **Bob Post** has selected **John Plump**, chief of Project Management, to fill in as assistant chief of Engineering Division until the assistant chief slot can be filled permanently later this spring.

**Jim Sims**, new chief of Real Estate, is another arrival from the "Banana Belt," a very appropriate label in Jim's case. He comes to the land of Winter Carnivals and ice fishing from Mobile District with duty in the Republic of Panama.

Down in Con-Ops, **Gary Green**, chief of the Enforcement Section in Regulatory Functions Branch, has resigned to give full attention to his new business.

**Tim Bertschi**, park manager at Blackhawk Park will have a new job starting Feb. 2. He will be the area park manager for the Western Flood Control Area Office, replacing **Arlee Keys**, who retired in December. As part of the change, the office will be relocated from Valley City to Fargo. The new park manager at Blackhawk will be **Tom Novak**, who is currently the resource manager at Eau Galle. He will transfer there on March 1.

Another park manager who will be moving is **Greg Struss**. Greg was the acting park manager at Cross Lake until **Walt Hermerding** came back. He will now be the park manager at Gull Lake on a one year temporary assignment.

If you like parties, start thinking about June (a good party takes a lot of planning). **Harlan Johnson**, new chief of Maintenance Branch is looking at ways to suitably mark the 50th birthday of the Dredge Thompson. The only problem is that nobody knows where the Thompson will be on its birthday. It all depends on the river and dredging requirements at the time.

## Plans for new PBS building explained

The large hole in the ground across from the Post Office building will be the new site for the Twin Cities public broadcasting television stations **KTCA** and **KTCI**.

**Jerry Huiting**, director of operations and engineering for the station, gave a presentation on Jan. 9 which explained the stations plans. He also explained some of the background of the station and the reason for the move to downtown St. Paul. Over fifty employees attended the meeting which was held in room 1219.

The building will consist of seven floors. The lower five floors will be a parking ramp, owned by the City of St. Paul. Two and a half of these floors will be underground and the whole ramp should have more than 900 parking slots.

The new **KTCA/KTCI** facilities will be on the top two floors. The current design for the block includes space for two more buildings which have not been developed yet. They expect the new building to be connected to the skyway system and **Huiting** said that there is an attempt to figure out a way to connect the Post Office also. The main problem is that the span between the two buildings is too great without some kind of support or special design.

The parking ramp is scheduled to be done by this summer and the completion of the television facilities is expected in 1989.

## Lyle Larson to be Historical Foundation representative

St. Paul retiree **Lyle Larson** has volunteered to be the local coordinator for the Corps of Engineers Historical Foundation.

The Foundation is proposing to construct an Engineer Historical Center and Museum and is currently in a \$2 million fund raising campaign to meet construction costs.

Additional information on the fund drive, the museum or the Corps of Engineers Historical Foundation can be obtained from **Lyle** by writing him at 9710 Utica Road, Bloomington, MN 55437.

## Death reported

**George F. Krogh** of St. Paul died on January 14, 1987 at the age of 103. George was a draftsman with Real Estate and Engineering during the 1930's and 1950's.



## February is National Heart Month

Exercise is an important factor in protecting yourself from heart disease and using the exercise room on the 16th floor is a good place to start. The room is open Monday through Friday, 7:00-9:00, 11:00-1:30 and 3:30-5:30.

If you have any questions about the exercise room or any other Feds for Fitness program, contact **Charles Foye** at ext. 7500.