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of Engineers

St. Paul District

Crosscurrents

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With no natural outlet, Lake Pulaski continues to rise, flooding many of the homes in the area. On August 1 when the photo was taken, the lake level was at about 966.5 feet. Now on November 25, almost three months later, the water level has risen six more inches.

Photo by Lyle Nicklay

High Water Forces Pulaski Homeowners to Evacuate

Over fifty homeowners have been forced to evacuate their homes by rising lake levels on Lake Pulaski. And with the water still rising, over 50 other homes are being threatened.

Lake Pulaski, located in Buffalo City, Minn., has no natural outlet for drainage. Therefore, the rising lake levels continue to flood many of the homes in the area.

In efforts to stabilize the water level on Lake Pulaski, the Corps completed a plan for the construction of a pumped pipeline outlet. The water from Lake Pulaski would be drained into Buffalo Lake which drains

into Deer Lake to Mill Creek and finally into the Crow River.

However, according to state rules, a lake cannot be artificially lowered more than 18 inches below the Ordinary High Water Level (OHWL).

In February of 1982, the lake level had reached 961.03 feet. During June of the same year, the DNR established the OHWL at 968.8 feet.

By March of 1983, the level of the lake had risen more than two feet. Many of the homes were being flooded and many more were being threatened by the rapid rise of

the lake.

In October 1983, the city council of buffalo requested that the Corps conduct a study to control the lake level.

However before an artificial outlet could be constructed, the lake level would have to rise four more feet.

Then in 1985 after a public hearing to lower the OHWL, the DNR reestablished it at 967.5 feet.

The water level as of October 15 was reported to be at 967.15 feet. With the rising

Continued on page 5

Commander's Viewpoint

by Colonel Joseph Briggs

As my family and I prepare for our first holiday season with the St. Paul District, I think that it is appropriate to take a few moments to share some of my thoughts with you.

Since joining the district in July, I have had an opportunity to visit most of the larger field sites and to meet and talk with many of you, including some of our retirees. I plan to continue my visits and hopefully see more of you during the coming year. These visits have helped to confirm my initial impression that the St. Paul District is indeed a special and proud part of the Corps family.

This past year saw a number of key developments for the Corps and the St. Paul District. At the national level, Congress has made progress toward resolving the question of cost sharing on civil works projects. When legislation is passed, this will eliminate a barrier which has virtually stopped all new construction in recent years. It will allow the district to move ahead on several much-needed projects which have been on hold.

Within the district, we have completed or nearly completed several projects this year which are providing our customers with essential protection or services. The dedication ceremonies at Winona and Lake City marked the completion of two successful projects. Additional projects at Big Stone/Whetstone and Halstad are operational and are providing flood protection to the residents of those areas. Construction continued during the year on flood control projects at Mankato, Enderlin, Velva and at a number of small projects.

Activities along the Mississippi River were also plentiful. Work began this year on our lock and dam rehabilitation program at Lock and Dam No. 10. The rehabilitation covers the older locks and dams and is expected to be completed by the mid-90's.

Our channel maintenance activities have been equally effective. We have completed several reconnaissance reports for dredged material disposal and entered into an agreement with the City of Minneapolis for a new dredge disposal site in Pool 1. We also completed the Read's Landing Project, which was one of the recommendations of the Great River Environmental Action Team (GREAT) Study. In addition, the Dredge Dubuque and its crew participated in a very successful demonstration of a new technique for dredging contaminated materials.

Our regulatory branch took a large step forward in simplifying the permit program in Minnesota this year. This permit program

now contains regional conditions, which modify nation-wide permits, and a new general permit for certain low-impact projects in Minnesota. Out in the field, members of Construction-Operations Division carried out the district mission with dedication and professionalism. In many localities, the only contact our contractors and local residents have with the Corps is with our field employees who continue to represent the district well.

Our Planning Division's basket has also been extremely full during the year. The Information Systems Plan and the Fargo-Moorhead Urban Study were completed during 1985. We shared our expertise in non-structural solutions to flooding problems with the Huntington District. Additionally, much effort was put into analyzing the benefits of upstream flood control storage in Canada as part of the Souris Basin Study. Work continued during the year on a number of small project and basin studies.

Even from this partial list of 1985 activities and accomplishments, you can see this has been a busy year for the St. Paul District. Fortunately, I am happy to say, there is still more work to be done. As we reflect on our past efforts and accomplishments, remember that 1986 will offer a new set of problems and challenges. I encourage each of you to carefully and continuously review your respective programs and your efforts to provide the best possible care for what appears to be an ever increasing list of customers. From what I have seen during my first five months here, I am sure that the St. Paul District is capable of meeting whatever challenges 1986 offers.

As the holidays approach, Sue and I wish all of you and your loved ones a safe and happy holiday season. May the coming year bring you all health, happiness and prosperity.

Thank you for a very warm and cordial welcome to the St. Paul family.

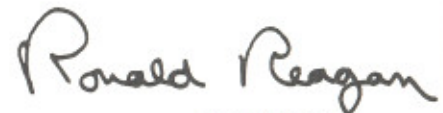
Holiday Message From the Commander in Chief

As we prepare to close the door on 1985 and open up a New Year, Nancy and I extend our very best wishes for a happy holiday season to each of you.

This is the time of year when the age-old longing for "peace on earth, goodwill toward men" fills our hearts, and because of your selfless dedication and your willingness to preserve the ideals of our Founding Fathers, America is at peace and remains firmly committed to the ideal of goodwill toward all people.

As we celebrate Hanukkah, Christmas, and the New Year, we want you who serve our Nation in uniform, and your families, to know how appreciative all Americans are of the sacrifices you make every day to keep America free and strong. This holiday season is a proper time for all of us to renew our pledge to the constant struggle to find a better and safer world.

Nancy and I wish you and your families a joyful and safe holiday season, wherever you may be.



Ronald Reagan
Commander in Chief

Many Lives Saved by Lock and Dam Personnel

While leaving the lock chamber, the canoeist applied too much power with an oversized engine, causing the canoe to flip. A woman who didn't know how to swim clung frantically to the canoe. In the meantime, her two male partners were being drawn downstream.

Tom Hemstreet, Lock and Dam No. 1, quickly put the life boat into the water. He threw the woman a life jacket and assured her that she would be alright until he came back.

Tom then went to rescue the two men. After getting them into the boat, Tom pulled the woman and the canoe to shore.

This is just one example of a rescue made by lock and dam personnel. Each boating season, personnel at the locks and dams are not only faced with operating and maintaining the locks and dams, but also rescuing and assisting people involved in a variety of boating accidents.

For St. Anthony Falls and Lock and Dam No. 1, most of the rescues made are to save suicide victims who jump off from one of the many bridges in Minneapolis.

"The worse part, of it all, is that each time a person tries to end their life, my people risk their life trying to save the victim," Roger Worth, Lock and Dam No. 1, said.

Since 1973, there have been 11 fatalities at the locks and dams in the St. Paul District.

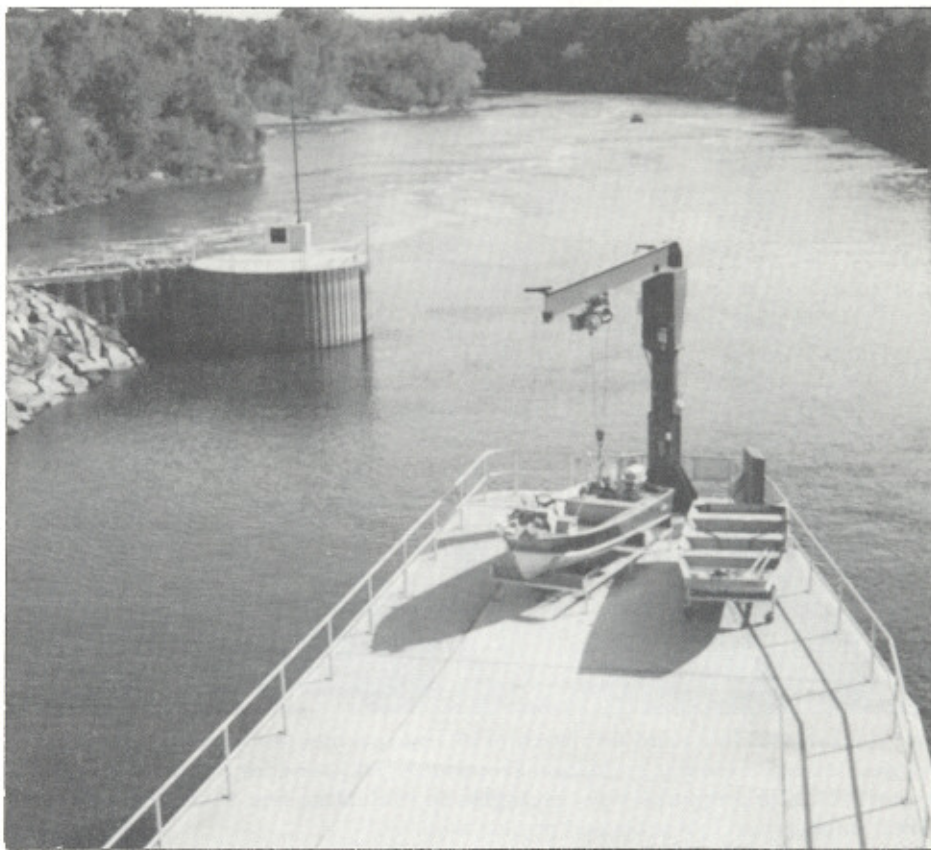
The last fatality occurred at Lock and Dam No. 7 in 1985 where a man and woman in a boat went through an open gate on the dam.

Stan Sperbeck, lock and dam operator, reached the woman in time to save her life. "By the time I reached her, she went under the water and surfaced long enough for me to grab hold of her," Stan said. "Unfortunately, the man was pulled under by the current and drowned."

Downstream, most of the rescues are made to boaters whose engines have stalled and the anchor won't hold.

"I remember one time there were two young fellas whose engine wouldn't start. As they came closer to the dam, they noticed a pile of debris. They both decided to try to jump onto the debris before the boat reached the dam. However, they missed the debris and fell into the water," Stan recalled. "If the personnel at the lock and dam had not noticed them, I'm afraid they might have been pulled under and drowned," Stan said.

However, not all accidents occur because an engine won't start. As Lee Stenerson, Lower Area 3 Lockmaster recalls, there was a group of Boy Scouts canoeing downriver. "We were about ready to lock them through



A life boat remains idle, for the moment, at Lock and Dam No. 1. In the event of an emergency, lock and dam personnel can lower the boat over the lock wall with a winch.

Photo by Pam Banks

when someone noticed that one canoe was missing. The missing canoe had drifted next to the gate on the dam with a couple of boys still in it. Their paddle had broken and the boys couldn't steer the canoe. So we hurried to close the gates on each side of the canoe and helped the boys to shore," he said.

Every three years, lock and dam operators are required to take a first aid course. CPR training is available on a voluntary basis.

With the knowledge of basic first aid, the lock and dam operators are able to help barge workers who have been injured while working on barges and recreational boaters with minor injuries.

At each lock and dam facility there are rescue boats, first aid kits and emergency baskets to lift people over the lock wall. Emergency numbers are also listed next to the telephone.

Although saving lives is not part of the job description, lock and dam operators do

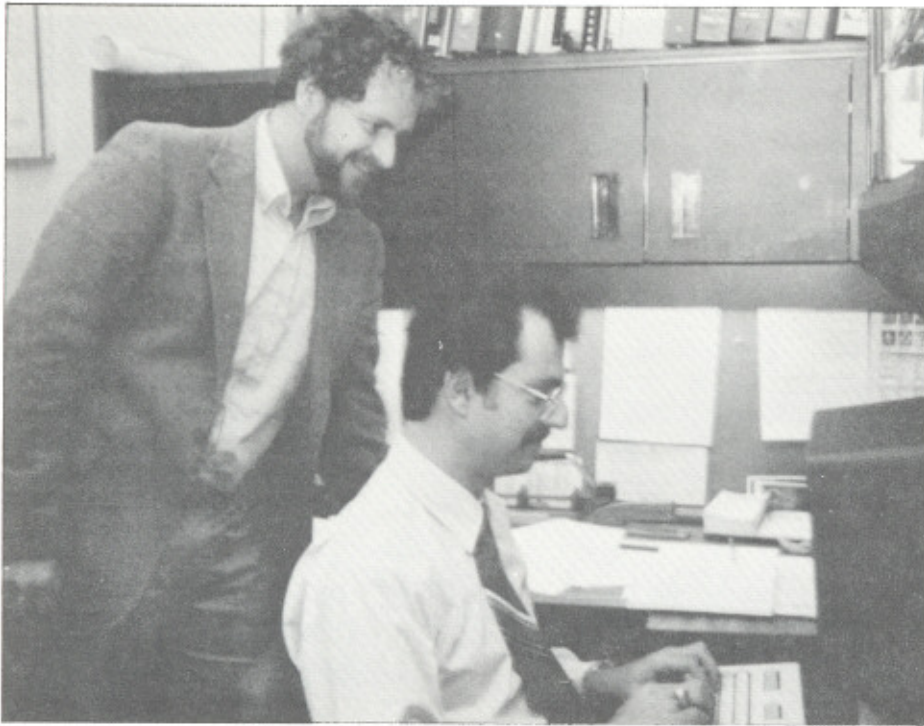
what is necessary to rescue someone in trouble. "A person can't sit there and watch someone drown. You do what you have to do," Bob Stahl, lockmaster at St. Anthony Falls, said.

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District Demonstrates 2 New Software Packages



Barry Drazkowski (left) and Bob Stackowiak test two new software packages that they developed for Habitat Evaluation Procedures (HEP) and for Habitat Suitability Index (HSI). The programs assist biologists in evaluating and analyzing wildlife habitat information in a proposed project area.

Photo by Pam Banks

The St. Paul District demonstrated two new software packages for Habitat Evaluation Procedures (HEP) and for Habitat Suitability Index (HSI) programs to the public for the first time in October.

The demonstrations were given by Barry Drazkowski, wildlife biologist, and Bob Stackowiak, chief of the Programming Branch, during a national workshop on microcomputer applications at Fort Collins, Colo.

In 1982, Barry and Bob met with Dr. John Belshe', chief of the Environmental Planning

at the Office of the Chief of Engineers.

The Habitat Evaluation Procedures, originally developed by the U.S. Fish and Wildlife Service, measures the benefits and negative impacts on wildlife habitats in a proposed project area.

According to Barry, the original procedures were complicated and very time consuming. Originally, the only way to gain access to the program was through the Fish and Wildlife Services' main frame computer in Boulder, Colo.

During this meeting, Dr. Belshe' autho-

rized the district \$35,000 to develop a simplified version of HEP.

Bob began completely rewriting the HEP program with technical assistance from Barry.

By 1983, the new program was completed. The program now allows the biologist to insert the data collected into a separate file. The Habitat Evaluation Procedures are then used to analyze the information in the file.

The new procedures only take 15 minutes to complete, cutting the time by 45 minutes from the original program, Barry explained.

In addition to the simplified version of HEP, a set of four utility programs—Hepsen, Hepplan, Hepmit and Target Year Analysis—were developed. Through these programs, data can be automatically set up in separate files and the impacts of different plans can be analyzed and compared.

The programs also evaluate the effectiveness of each management or mitigation plan and analyzes the amount of habitat acres that will be affected during the life of a proposed project.

The last program Bob developed was the Habitat Suitability Index. This program uses field data to calculate the value of a habitat for individual species.

For example, a biologist would select a few species to represent the habitat in the area. The biologist would then go to the area and collect samples on the types and numbers of trees, shrubs and grasses. "The computed suitability index is used as input to HEP," Bob said.

Both the HEP and HSI programs can be used in the Harris minicomputer, MS-DOS (IBM PC) microcomputers and AT&T 3B2's.

The programs are now available through several public computerized bulletin boards so that any user can gain access by downloading (copying).

Personnel Reassigned

Personnel in the Construction-Operations Division have been reassigned to different offices within the division.

Harold Taggatz, chief of the Maintenance Branch, has replaced Bill Goetz as acting chief of the Construction Operations Division. Taggatz will hold this position for 120 days while Goetz is on detail to OCE.

Craig Hinton, chief of the Mississippi River Section, has replaced Harold Taggatz as chief of the Maintenance Branch. Hinton will hold this position for 90 days.

William Parsons, chief of the Project Operations Branch, has replaced Mike Schwalbe as chief of the Construction Branch. Schwalbe has been assigned as chief

of the Civil Works Section.

Dennis Cin, chief of the Regulatory Functions Branch, has replaced William Parsons as chief of the Project Operations Branch.

Char Hauger, chief of the Permit Evaluation Section, has replaced Dennis Cin as chief of the Regulatory Functions Branch. Hauger will hold this position for 120 days.

District Shares Expertise on Nonstructural Projects

In 1977, a 500-year flood left residents devastated in the Tug Fork Valley of West Virginia. Over 700 homes were flooded in the community of Williamson alone, causing about \$79 million in damages. In May 1984, the community was again flooded, causing \$45 million more in damages.

To assist the residents of the valley, Congress authorized nearly \$250 million to the Huntington District to begin developing and implementing a plan to provide flood protection in the entire valley.

Beginning with Williamson, the Huntington District divided the community into four distinct geographical areas.

In the first two areas, East Williamson and Fairview, the district has begun developing plans for a nonstructural project.

However, while developing plans for the two areas, the Huntington District requested that the St. Paul District advise them on the nonstructural features of the project.

St. Paul was the first district to successfully complete a major nonstructural project at Prairie du Chien, Wis.

Jody Rooney, Tom Raster, Suzanne Gaines and Gary Ditch visited the Huntington District and discussed the various aspects and problems encountered during the Prairie du Chien project.

"However, after arriving at Huntington, we soon discovered that their project was very different and quite larger than the one in Prairie du Chien," Tom Raster, project manager, said.

According to Gary Ditch, chief of Real Estate, the town of Williamson is located in the flood-plain of the Tug Fork River. There is very little flat land available on which to relocate residents because of the Appalachian Mountains.

In the preliminary nonstructural plans, the residents of East Williamson and Fairview can either volunteer to be relocated, to flood-proof their homes or to remain in the flood-plain.

"However, there is a lot of incentive for people to relocate," Jody Rooney, economist, said. "Homes will be bought and residents relocated, all at Federal government cost."

For example, if a family of six is now living in a two bedroom house, the government must find a decent, safe and sanitary replacement home as required by the Public Law 91-646. This means the family would probably be given a four or five bedroom home, depending on the circumstances, Gary explained.

The Huntington District is planning to demonstrate how flood-proofing will work

in the two suburbs. "Eight residents have already volunteered," Suzanne Gaines, sociologist said. "It's really fascinating. Huntington will be raising the homes up to 12 feet off the ground."

The flood-proofing demonstrations to elevate the homes are intended to encourage others to volunteer to have it done to their homes.

The last two areas, West Williamson and Fairview, will be protected by giant floodwalls. Unlike those in the St. Paul District, the floodwalls will be constructed of steel sheetpiling cells, 52 feet in diameter and about 22 feet high. The proposed floodwall for West Williamson will be 6,300 feet long, costing more than \$49 million. While the central business district, will be protected by a 3,900 foot floodwall, costing about \$26 million, Tom said.

"Overall, the entire project is quite unique," Tom said. "Up river from Williamson, the Huntington District plans to straighten one loop of the river by blasting through the mountains. The original channel would then be filled with the rocks and soil removed from the mountains, making flat land for construction of homes or businesses away from the flood-plain."

Pulaski

water and the lowered ordinary high water mark, a path has been opened for a Corps' project at Pulaski. The water level is now within 18 inches of the new OHWL.

With this obstacle removed, a new problem has appeared which will have to be dealt with.

Landowners downstream of the proposed outlet have sent petitions to the DNR opposing the project. According to the petitions, the landowners feel they already have enough water. When the Crow River floods, the access water flows into Buffalo and Deer lakes, flooding many of the homes in the area.

However, according to the plans developed by the Corps, water would only be pumped into Buffalo Lake when the water level is down.

To maintain the water level on Lake Pulaski at 966 feet, water would be drained less than 43 days a year, Al said.

If the plans are approved, construction of the outlet will begin in 1986. The total cost of the entire project is estimated at \$700,000.



Shown above is one of the many homes that were surveyed in 1983 when the water level was 963.5 feet. Since that time, the lake has risen almost four feet.

Increased Participation Marks Successful CFC

The 1986 Combined Federal Campaign in the St. Paul District raised more than \$19,000 for local, national and international charities. The annual charity drive for federal workers was completed in late November.

The \$19,388 contributed by district employees was nearly \$2,000 more than was raised in last year's campaign, Ken Gardner, district CFC coordinator, said. "More importantly," he said, "participation was up over previous years. This year, 256 district employees contributed to the CFC compared to 222 last year. We are reaching more employees with the CFC message and they are responding with cash gifts and contributions through the payroll deduction

program."

The CFC is held throughout the federal government each fall. It is the only fund raising activity authorized for federal employees at their place of work.

According to Gardner, the credit for the success of the campaign goes directly to office and section coordinators who contact employees in their section. "The success of the campaign depends primarily on the attitude of the office coordinators and their willingness to contact their fellow workers and to present the CFC message in a positive way. This year's coordinators did an outstanding job as evidenced by both the increase in contributions and participation," he explained.

A HEALTHY NEW YEAR

If you're thinking about resolutions to make for 1986, you might consider these simple measures to increase your prospects of good health in the New Year.

- Quit smoking.
- Reduce alcohol misuse.
- Reduce your intake of excess calories, fat, salt and sugar.
- Exercise regularly.
- Set up periodic screening, at intervals determined by age and sex, for major disorders such as high blood pressure and certain cancers.
- Obey speed laws and use safety belts.

Curbing Fraud, Waste and Mismanagement

Two anonymous complaints reported that a civilian engineer was receiving unlawful gratuities from a contractor. A six-count federal grand jury indictment charged the engineer with accepting bribes, conspiracy, obstruction of justice and making false

statements. The sentence: five years in prison and a \$20,000 fine.

An inquiry into a \$88.4 million contract found that \$16.5 million more than needed was spent because of poor contract performance estimates and deficiencies in performance price evaluations. The contract is under review for possible termination.

A Defense Hotline tip alleged that a DoD investigator falsified information on an official investigative report. The allegation was confirmed and the employee was fired.

These are just some of the many diverse examples of DoD efforts to check fraud, waste and abuse that are outlined in the Office of the Inspector General's Semiannual Report to the Congress.

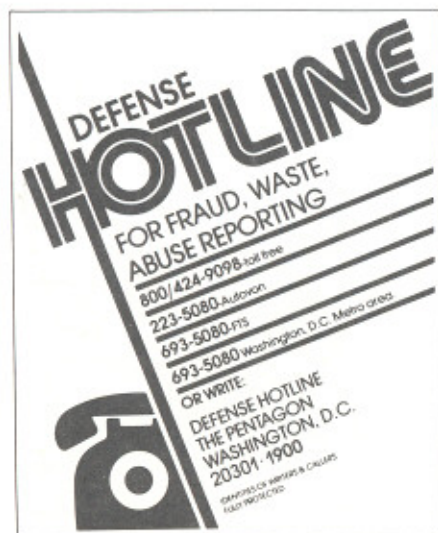
During the reporting period (Oct. 1, 1984 through March 31, 1985) 11 separate DoD internal audit and review organizations issued 8,891 reports with potential monetary savings of more than \$1.6 billion.

On the contract audit side, the Defense Contract Audit Agency and the U.S. Army Corps of Engineers issued 27,199 reports and questioned more than \$15.7 million of

pre-award and post-award contract costs. Of the reports issued, 7,935 were closed, resulting in a net savings of more than \$2.8 billion.

Criminal investigations during this period resulted in fines, penalties, restitutions and recoveries amounting to more than \$37 million. The Defense Criminal Investigative Service, the Army Criminal Investigation Command, the Naval Investigative Service and the Air Force Office of Special Investigations together closed 7,639 cases. The result: 468 convictions and indictments and 236 contractor suspensions and debarments.

The Defense Hotline program continues to be an important avenue for reporting fraud, waste and abuse according to the report. During the reporting period, 3,941 calls and letters were received. The military service's hotlines recorded an additional 4,111 calls and letters. Significant Hotline cases dealt with unauthorized services, waste of funds, excessive pricing, false reporting, criminal misconduct, abuse of overtime and overpriced spare parts.



District Participates in National Teleconference

A national teleconference entitled "Emergency Planning for Potable Water Supplies" featured a panel of experts who discussed the water supply situation in the United States during a major disaster.

Herb Nelson, study manager in the Plan Formulation Branch, attended the two day conference that was sponsored by the U.S. Environmental Protection Agency.

To stimulate interest among emergency planners, the recent earthquake in Mexico City was used as an example to show the importance of having available a dependable emergency water supply.

According to the panel, many cities in the United States are not capable of providing a dependable supply of water in the event

of a major natural disaster or national emergency.

A unique aspect of the conference was the use of a satellite network to broadcast the conference to many areas within the United States, Herb said. Emergency planners from local, regional, state and federal agencies were able to participate in the conference by calling the panel to ask questions.

The Corps of Engineers has been directed to develop emergency water supply plans for each state. To do this, information will be collected from existing local, regional and state agencies who work with water supply. Plans for each state are scheduled to be completed by 1990.

The St. Paul District has been authorized to begin developing an emergency plan for the state of Minnesota.

The plans will be based on emergencies such as major regional flooding and certain national emergencies that could overburden or destroy existing water supply systems in Minnesota.

When the plans are completed, the information will be made available to emergency planners throughout the state.

As pointed out in the conference, there is a need to consider and to reduce the risk of the nation's water supplies from being cut-off during a major national or natural emergency, Herb said.

To the People of the Corps

Editors note: The following article is part of a letter from the Chief of Engineers Lt. Gen. E.R. Heiberg III to Corps personnel on the Army's theme "Leaders in Customer Care."

You are the success of the Corps. You are its future. Without you, our soldiers would have no barracks, their families would be ill supported, the Nation's dredges would merely drift in the harbor, and our dams would crumble from lack of care.

One of the primary things you have taught me is that we must truly CARE for our customers to be successful.

Therefore, I have chosen "Leaders in Customer Care" as the theme and vision for

the Corps' future. I believe that focusing our attention and best efforts on caring for the customer is the pathway to improving further our value and service to the Nation. That **caring** is the essence of our mission and the key to our future. It is my judgement that we cannot effectively care for our customers unless we first earn the trust and confidence of the **people** in our customer's offices. Your success has demonstrated to me that getting close to the customer is a must. And it can begin as simply as asking questions and truly listening. However, just paying attention is not enough. We must be ready to assume the responsibility for taking action. It's being able to say to

ourselves: "I accept the consequences of my choices, that I am the one responsible for my success, and there are no excuses."

Finally, there can be no customer CARE unless we all share a bone deep commitment to excellence.

Caring is something that comes from within each of us and flows outward to the people in our lives.

Take care of yourself and your loved ones. Take care of those who work around you. Take care of your customer. And you will, by example, inspire others. I charge each of you to be "Leaders in Customer Care."

REHABILITATION POSITIONING DEVICES

WORD SCRAMBLE

T	N	S	L	I	P		
□	○	□	□	□	□		
B	A	A	L	O	D	P	R
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Arrange the circled Letters to form the word below.

□	□	□	□	□	□	□	□
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We work together to make this person independent in many areas of life.



Answers on page 8

People Behind the Corps



Peter Victorov

Photo by Pam Banks

Seventy-eight and still not ready to retire. That's Peter Victorov, a hydraulic engineer in the Engineering Division.

Born in St. Petersburg, Russia, Peter was drafted into the Soviet Union Army in 1941 during World War II. A short while later, he was taken prisoner by the Germans.

After the war, Peter went to work for the Department of Public Works for the French Government in Morocco and worked as a project engineer for almost 11 years.

There were very few engineers in French Morocco, Peter said. An engineer was responsible for everything—planning, designs, contracts and construction. The whole project went quite fast. One year would be spent on planning and computations and the next year the project would be constructed.

After Morocco became an independent Arab State, Peter decided to bring his family to the United States in 1958.

He took a job as a steel detailer at the St. Paul Foundry and Manufacturing Com-

pany to learn the basic measuring system of the United States. "I was taught the metric system while in high school and that's all I ever had to use until I came here," Peter said.

Then in 1962, Peter began working with the John's William Consulting Engineer Company in Toledo, Ohio as a design engineer. In 1965, Peter moved back to the metropolitan area to work with the Barr Engineering Company in Minneapolis.

Finally in 1972, Peter came to work for the St. Paul District. Most of the work Peter does for the district involves hydrology and hydraulic computations.

Peter is a registered professional engineer in the state of Ohio.

As a past-time, Peter enjoys religious and science philosophy. He is also the president of the Russian Orthodox Church in Minneapolis.

Peter speaks Russian, French, German and English. "However, I can read English much better than I can speak it," Peter said.

Winona Project Completed After 20 Years

Dedication ceremonies were held for the Winona Flood Control Project at Levee Park in Winona, Minn. on October 13. Corps officials from the district and North Central Division joined city officials from Winona to dedicate the completion of the 20 year old project.

The completed project provides protection to the residents of Winona against flooding from both the Mississippi and Burns Valley Creek on the south edge of the city.

The Winona project was built in two phases. The first stage, completed in 1967, included all work north of the Minnesota Highway 43 bridge. The second stage, started in 1979, includes all work south of the bridge and along Burns Valley Creek.

In providing flood protection for Winona, the Corps has constructed more than 14,000 feet of earthen levee, 2,600 feet of concrete flood control structures and modifications to a bridge and channel on Burns Valley Creek.

Answers

T S P L I N T	
H A A L O D P R	
L A P B O A R D	P A T I E N T
O T O F O H O T	
F L O O T	B L O O T
U O O R	L E M M I
H O O K	H E M O
S E N S I B L E	
H A R T N E S I S	

We work together to make this person independent in many areas of life.

