#### BG WEINERT NAMED DIVISION ENGINEER

Brigadier General Donald C. Weinert has been assigned as North Central Division Engineer, Chicago, effective 1 April.

He will succeed Colonel C. Remson, Jr., who will return to his previous assignment as Chicago District Engineer. Currently, General Weinert is Chairman of the Army Study Group, Office, Chief of Engineers, investigating ways to improve the operation and maintenance of Army facilities.

As North Central Division Engineer, General Weinert will direct



Pioneer Press staff reporter Denise Johnson interviews St. Paul District Engineer Colonel Gay in his office last week on the Roseau River Flood Control Project and District missions in general. Ms. Johnson, environmental reporter for the St. Paul newspaper, is the daughter of Inman Johnson, AS-RM.

### Juside.....

- WINTER RECREATION AT SITES
- FORMER DE PAYS VISIT
- ICY BEAUTY AT ST. ANTHONY FALLS
- EMPLOYEE ASSISTANCE PROGRAM

civil works activities in the Great Lakes and Upper Mississippi River basins. He will oversee the work of five Corps districts which have responsibility for flood control, navigation and beach erosion control in all or parts of 12 states. He will also supervise Corps activities related to international agreements between the United States and Canada on the regulation of boundary waters.

General Weinert was born in
Aberdeen, South Dakota, and is a
1952 graduate of the U.S. Military
Academy at West Point, New York.
He holds a master of science degree
in engineering from Purdue University. General Weinert has attended
military schools at all levels including the Army War College and the
Army Command and General Staff College.

Among his key assignments were duty as Assistant to the District Engineer with the San Francisco and Sacramento Districts and later on District Engineer at Little Rock.

He has been awarded the Legion of Merit with oak leaf cluster, the Bronze Star with an oak leaf cluster and the Army Commendation Medal with three oak leaf clusters.

General Weinert is a registered professional engineer in Texas. He is married and has five children.

GREAT STUDY FEATURED
in RECREATION BULLETIN
The "St. Paul District Peoplewatchers" is the title of an article
in the recent RECNOTES bulletin of
the Recreation Research Program
at WES.

ST. PAUL DISTRICT PEOPLEWATCHERS

Through its involvement in the Great River Environmental Action
Team (GREAT), the St. Paul District has played a lead role in pulling together various research efforts that were focused on the Upper Mississippi River this past summer. The studies are to provide information needed and requested by resource planning and management personnel.

One of the concerns of the GREAT recreation work group is the continued maintenance of islands that are created by disposal of dredged material and are used by thousands of recreationists each year for camping, picnicking, sunbathing and other related activities. A survey of these island users was conducted this summer to determine their preferences and attitudes about the use of these by-product resources. The islanduse survey was closely coordinated with an extensive river-use study conducted by the University of Wisconsin on the St. Croix River, a main tributary of the Upper Mississippi. These studies were also linked with a District study to determine future demands for recreational craft lockages on the Upper Mississippi River from the Twin Cities to St. Louis. A survey of boaters using the lockage facilities provided most of the information needed to determine these demands. This fall, efforts will be directed to reviewing the results of all three studies. Study results will fill important gaps and provide an updated picture of public use on the Upper Mississippi-St. Croix River systems.

To determine the need for new small-boat harbors on Western Lake Superior, and the need for preparation of master plans on Western Lake Superior harbors maintained by the District, a recreational boating study was also conducted this summer. A secondary objective of the study was to identify an economically efficient and statistically effective



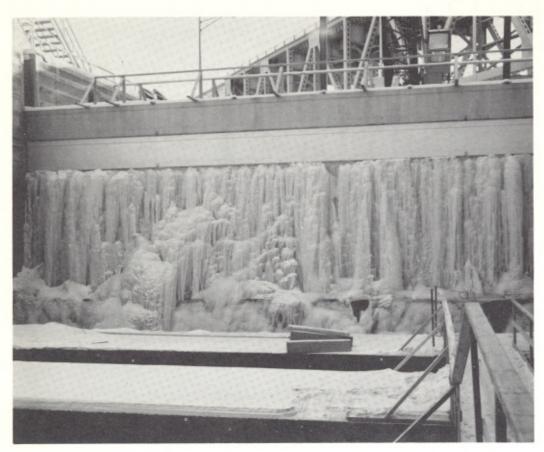
Ms. Alice Tripp, an outspoken opponent of the high voltage power line crossing of Minnesota farm land, stopped at the District Office last week where her daughter, Meg Tripp, is writer-editor in the Environmental Resources Branch. Ms. Tripp, whose farm is one of those affected by the present routing of the power line, was in St. Paul to attend Federal Court hearings on the validity of the environmental impact statement prepared by the power company.

Meg, whose principal responsibility is the preparation of EIS's, says: "I sat in on the hearing for a while, and was impressed with the importance of following the regulations exactly as to the scheduling and public review for each step. The issue before the court while I was there was whether the affected landowners had had the opportunity to review and comment on a supplement to the power company's impact statement, as required by NEPA (National Environmental Protection Agency)."

#### 

methodology for estimating recreational use, user patterns, and future use demands. Aerial photography and 8mm cameras were used, along with more traditional methods, to test the effectiveness of remote sensing techniques.

The results of the studies should be available early in 1978. Information regarding these study efforts may be obtained by contacting Jim Holleran at the St. Paul District, ext. 7574



Winter's icy artwork graces the bulkhead installed at Upper St. Anthony Falls Lock and Dam for the dewatering last December. The structure is undergoing maintenance and repair and will be back in operation before the start of navigation season.

The bulkhead is a temporary dam constructed of five thick steel girders to hold back the water while work is underway.

#### Branch Reorganization

The Hydraulic Engineering and Foundation Materials Branch is the new organization formed from the previous Hydrology & Hydraulics Branch; Foundations, Materials and Surveys Branch; and Sedimentation Project Unit of the District Office.

Effective 12 February, the new Engineering Division branch offices structured under Office of Chief of Branch are: Sedimentation Project Unit, Geology and Surveys Section (including Field Survey Party), Dams and Special Studies Section, Levee and Channel Design Section, Hydraulic Section, Hydrology Section (including Gage Party).

Its mission is to provide technical expertise on subjects relating to hydrology, reservoir regulation, hydraulic design, interior drainage design, sanitary engineering, flood intelligence, geology, surveys, soils, foundations, materials, embankment design, levee design and channel design. Authorized strength is 57.

#### CFC LUNCHEON NOTES SUCCESS

St. Paul District was among those invited to attend a luncheon on 15 February to honor those agencies and volunteers who succeeded in raising a record amount for the Combined Federal Campaign in the Twin Cities area last fall. Some 85 Federal agencies were among those at the Prom Ballroom ceremony at which St. Paul District received a first year silver plaque for a per capita gift of at least \$37.30.

Jim Gagnon, ED-D, was campaign manager for the District, which contributed \$13,156, with 83% participation by employees, both increases over previous years. The Twin Cities record this year was \$394,700, or 102.2% of the goal.

Fred Vogele has been appointed Acting Finance and Accounting Officer, for Grant Logan, who has been on sick leave. Grant is returing to work only on a part-time basis at present.

## JUST BETWEEN US ..

OUR SYMPATHY is extended to Roy Jetter, Lock and Dam 10, on the death of his son, Mark Alan, 19, in an auto accident on 21 January.

CONGRATULATIONS ON THE MARRIAGES.... on 20 January, Richard Hollom, DC, was married to Margaret Stephens, Minneapolis, and on 27 January, Jack Calhoun, DC, was married to Karla Knudsen, Minneapolis.

SYMPATHY is extended to former employee GLORIA JORGES on the death of her father in Wabasso, Minnesota.

CONGRATULATIONS ON THE BIRTH of a boy born on 5 February to JAN and MIKE SCHWALBE, former District employees now in Trinidad Lake, Colorado, where Mike is serving with Albuquerque District. They have named him William Michael.

FAREWELL to our librarian, HOWIE EPSTEIN, who leaves the Corps this month to take a position with Abbott-Northwestern Hospitals in Minneapolis.

SORRY 'BOUT THAT! The names of two students in last issue's story about co-op employees were given to us incorrectly. They are Mary Leykom and Dave BAllman both in CO-GR.

ARNE THOMPSON stopped in to say that he is not a new employee as listed in the last edition. He has his 10-year pin. However, since he'd been working at the Minot Flood Control project, when he transferred back into the office, he was somehow listed as a new employee.

ROGER JOHNSON, who retired 7 years ago from FM&S Branch, is recovering from injuries he suffered 19 January when he was struck by a car while on his way to a basketball game on the University of Minnesota campus, Harry Novak informs us. He has a fractured clavicle and fractures of his left leg above and below the knee. He'll be undergoing therapy for another month at the Metropolitan Medical Clinic, Minneapolis, 55415.

#### MIKE DOWNS TOPS by Clyde Giaquinto

The Corps of Engineers chess tournament came to a close on 6 February with Michael Downs as the undefeated player after 4 rounds. A fifth round was not necessary because the other two contenders for first place, Dick Lundstrom and Don Kohler, played to a draw, thereby giving them a total of 3-1/2 points to Downs' 4 points.

Many people have expressed a strong interest in playing in the chess competition, so other tournaments will take place in the future. I will be looking forward to playing as will the rest of the chess enthusiasts here at the Corps.

#### GOLF TOURNAMENT SLATED

The North Central Division golf league has challenged the St. Paul District to a match at Devils Head Golf Club near Merrimac, Wisconsin, on 22 July 1978. In a similar challenge last year, eight St. Paul District golfers successfully trounced the NCD team.

Devils Head Golf Club, about 240 miles from the Twin Cities, has a fine golf course and an excellent restaurant with reasonable prices. You may wish to bring your spouse or family to attend the match or tour the Wisconsin Dells during the game. Approximate costs last year were \$7 for golf and \$28 for a double room. Package rates are also available for the weekend or you may wish to make the trip in 1 day, as some golfers did last year.

At least 10 golfers each from NCD and St. Paul District are needed to hold the match. If you are interested in participating, please contact Dave Haumersen (7576) or Al Bjorkquist (7494).

A Lockmaster's Field Conference was held 14 January in Winona, Minnesota. This meeting concentrated on technical aspects, as a follow-up to the District Office annual conference.

#### WINTER RECREATION

by Nancy Johnson

For some, outdoor activities end on the last day of summer and aren't revived again until the first day of spring. Others take the attitude that if you can't beat the weather... enjoy it.

Activity on the Corps lakeside recreation areas doesn't end with the onset of cold weather. It is quite common to see groupings of ice houses on Leech and Winnibigoshish Lakes, some of which are equipped with all of the modern conveniences Of home.



The number of cross country skiers on Corps land is increasing, but the activity isn't as popular as other winter sports. Even occasional hang gliders brave the cold temperatures at Eau Galle.





Tom Oksness, CO-PO, says snowmobiling is the most popular recreational past time in the headwaters, with ice fishing a close second.

A celebrity snowmobile run took place 3 and 4 February at Gull Lake. Among the celebrities competing were representatives from the area media, members of the Minnesota Vikings and Kicks, and Miss Minnesota Universe. Each participant who drove the course had pledgers pay him a per mile rate and the proceeds were donated to the March of Dimes. The trail was from Anoka to Brainerd, and the March of Dimes received \$11,000.

An ice fishing contest sponsored by the Eau Galle-Rush River Sportsmen's Club was held 12 February at Eau Galle. Many prizes were awarded, including those for catching the largest and the smallest game and rough fish, the most fish caught, being the youngest and oldest participants in the contest, and the one that travelled the greatest distance. Stan Anderson, dam operator at Eau Galle, counted 93 cars of participants and watchers.

The Snow Valley Riders, a local snowmobile club had some 67 snowmobiles out for such activities as slalom runs and races. There was also a snowmobile rally on the lake and 18 participants played softball—with bats and bases—while on their machines.

According to Stan, "everyone had a ball."

So once the temperature starts to dip, the choice is yours...either hibernation or recreation.

### To stabilize Ashtabula shoreline

## 50 tons: a lot of hard rocks

Work has begun on the first phase of a massive Corps of Engineers project to control erosion along the shoreline of Lake Ashtabula. According to Dean Peterson, project engineer, contractors' equipment is currently "on the move," stockpiling some 50 tons of rock that will be placed along 10-15 miles of vulnerable shoreline.

The total project, which may take from five to 10 years to complete, calls for rock placement along about 78 miles of Ashtabula shoreline, said Peterson. The graded rocks, ranging in diameter from two to 24 inches, will be placed only in areas where the cutbank is higher than three feet, and crews are trying to "hit" the most critical areas first.

Recent sub-zero temperatures have made working conditions considerably less than pleasant for employees of the two stockpiling contractors (Northern Improvement of Fargo and Wayland-Hollinshead and Sons of Rogers), but the cold weather is actually needed to carry out the job, said Peterson.

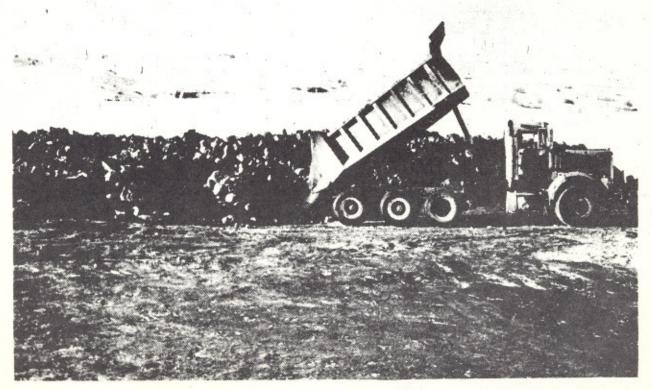
Operating the extremely heavy machinery required is easier and less destructive of both roads and environment when the ground is well frozen, he explained. When loaded with rocks, a single truck weighs about 25 tons, so in warm weather it would probably cause extensive damage to the roads it must travel between farmers' rockpiles and the stockpiles along the lake, he said.

Also, the deep ice on the lake's surface and along its shoreline will allow rock-placing machinery to gain access to the eroded cutbanks without scarring and gouging the grassy stretches along the shore. To place the rocks after the earth has thawed would be environmentally unsound because, ironically, the resultant damage to the soft ground would cause still further erosion, Peterson said.

The job of placing the rocks now being stockpiled will be bid on a separate contract, with bids scheduled to open Jan. 31, said Peterson. Hopefully, the placement will begin in mid-February and continue until mid-March, when the ground is expected to be too soft to allow further work.

Rocks for the current, first phase are being stockpiled in three locations: about 10,000 tons will be temporarily stored just south of the Ashtabula Crossing cafe; another 20,000 tons are being piled on Bob Lee's land, on the west side of the lake; and another 20,000 tons of rock are being stored near Sibley, Peterson said.

Shoreline areas where these rocks will be placed are the high-cutbank areas included in: a two-to-three-mile segment along the east shore from Ashtabula Crossing almost to Bayshore Resort; on the west side, a four-mile stretch from Katie Olson's Landing up to where Baldhill Creek empties into Lake Ashtabula; and an approximately four-mile stretch on the lake's west side from below Sibley to the old Highway 26 crossing.



Erosion control

One of Northern Improvement's heavy-duty trucks unloads about 15 tons of rocks at a stockpile located just south of the Ashtabula Crossing cafe. In all, about 50 tons of rock are currently being stockpiled in three different locations near Lake Ashtabula in preparation for placement along segments of shoreline where erosion is a problem. The project is being conducted by the U.S. Army Corps of Engineers (More photos on page 10).



This architect's sketch shows the revamped front of the Canal Park Marine Museum

# Marine museum builds up steam

Groundbreaking for a \$500,000 addition to Duluth's Canal Park Marine Museum is expected about May 15 with the building to be finished by the summer of 1979, according to Pat Labadie, curator

Labadie says the new building will consist of two floors with about 8,000 square feet of exhibit and work space, literally quadrupling the size of the present structure. There will be a large exhibit hall and a smaller gallery below it, a work and office area on the lower level and an auditorium-lecture hall to seat about 100.

Plans for the new building are being developed by Architectural Resources Inc., Duluth, and are expected to be completed by April 1. Up to 7,000 persons a month are expected to visit the new building in the initial summers.

Exhibits for the enlarged museum will be designed by Joseph A. Wetzel Associates of Stamford, Conn., under contract with the Army Corps of Engineers. They will include replacement or redesigning of all the present exhibits as well as long-term displays for the new spaces.

A full-sized pilothouse will be reconstructed inside the museum, along with three turn-of-the century steamboat cabins. Operating radar and radio equipment will be featured, and the two-story steam engine from the tug Essayons will be demonstrated, much like the rail engine at the Depot.

Vessel schedules probably will be shown on TV monitors like those used in modern airports and the staff will provide commentary on all passing ships. New displays will provide detailed information on shipping and harbor activity and on the work of the Corps of Engineers in the Lake Superior area. They will feature 30 scale models of Lakes craft, representing Lakes ships from the French exploratory ship Griffon (1679) to the new 1,000-foot freighters. Small craft also will be shown from time-to-time.

Another new exhibit will deal with the character and ecology of Lake Superior, explaining the Corps' role in maintaining the quality of the resource. Most of the artifacts and materials for the displays have been provided by the people of Duluth and Superior and by the Lake Superior Marine Museum Association, an organization of some 200 museum benefactors.

Funding for the museum operation, the building addition and new exhibits will be provided by the Corps. The museum will will open (free) year-around.

Attendance for 1977 was 465,000, up about two percent over 1976, Labadie reports. This is 30 percent higher than the previous three-year average.

Projections for 1978 suggest a similar visitation, Labadie says, and it is assumed that the museum will draw that number in the future

A recent survey conducted by the UMD Economics Club indicates that about half of the convention-goers visiting the Twin Ports call at Canal Park. "And it seems to be a fair estimate that a much higher percentage of regular tourists are attracted there, too, by the bridge, the museum and the passing ships," Lahadie concludes



The Corps' Marine Museum, at Canal Park, Lake Superior Area

#### MARINE MUSEUM SOUNDINGS

by Pat Labadie

Attendance has been light after an unusually busy Holiday period. There is no shipping activity in the area now, with the last local trade having ended for the season around the first of the year.

The staff has during the last two weeks completed the Eco-Expoz printed informational materials in anticipation of the spring school tour season. We have also completed several exhibit units relating to Lake Superior water quality, Corps dredging, and the significance of the maritime trades to people of the area. Further exhibit work is underway on related displays and educational materials for spring, and on preparation of various materials for the display contractor working on the building addition.

Dunagin's People / By Ralph Dunagin



# Recreation - Resource Management Conference



COL Gay addressing the conference



Ed Sunde, Leech Lake; Cliff Tusberg, Lac qui Parle, and Clarence Bernardson, Pokegama.



Gary Miller, Remer; Pat Labadie, Duluth Museum, and Don Daly. Sandy Lake.

## MEET 6 - 10 FEBRUARY

The Recreation-Resource Management Conference was held 6 through 10 February in the District Office. The biannual conference was geared to brief field personnel about events of the upcoming year and to inform them of any changes.

This year, a new course was introduced for the first time. "Interpretation" was taught by Dick Abraham, coordinator for the New Zoo in Apple Valley. The course, focusing on natural resources, included a field trip to the Dodge Nature Center to see interpretive techniques handled first hand. The course was designed to provide exposure to existing state and private interpretation/environmental education.

Also included in the conference was required supervisory training and talks on how specific departments fit in with the field sites.

According to Val Burlingame, CO-PO, "the conference accomplished what the District wanted it to."



Marty Ehrhardt, Gull Lake, and Dick Otto, CO-PO



Val Burlingame, CO-PO, and Chuck Adams, Orwell Dam



Marty Ehrhardt, Gull Lake; Chuck Adams, Orwell Dam; Gary Miller, Remer, and Stan Anderson, Eau Galle.



Glen Kress, Lake Traverse; Don Daly, Sandy Lake; Ed Sunde, Leech Lake; Clarence Bernardson, Pokegama, and Marty Ehrhardt, Gull Lake.



Tom Oksness, CO-PO; Cliff Tusberg, Lac qui Parle; Gary Miller, Remer, and Walt Hermerding, Cross Lake.



#### **Employee Assistance Program**

A new program for District employees was introduced recently. The Employee Assistance Program is geared to help employees and their dependents overcome personal problems such as alcoholism, drug abuse, marital problems, emotional or family problems. The program will be conducted on a strictly confidential basis between the employee and an independent outside counseling agency, the Metropolitan Clinic of Counseling.

Any employee or dependent of an employee can take advantage of the diagnostic portion of the program at no cost. Any expense for actual treatment or other assistance will be the obligation of the employee, except where health or other type insurance would cover the cost.

The program is not designed to provide treatment or continued counseling, but rather to provide early problem assessment, short term counseling and subsequent referral when needed.

All records concerning this program will be kept by the designated counseling resource and will not become part of the employee's personnel file.

This program has been developed for the benefit of the District employees and their dependents and all are encouraged to take full advantage of it.

If you wish to utilize this service, all you have to do is call the Metropolitan Clinic of Counseling at the numbers listed below and ask for the Employee Assistance Counselor:

5050 Excelsior Boulevard St. Louis Park, MN 55416 612-920-8788

1515 Charles Avenue St. Paul, MN 55101 612-645-7947

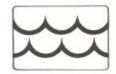
301 W. Burnsville Crosstown Burnsville, MN 55337 612-890-2902

999 50th Avenue NE Columbia Heights, MN 55421 612-571-8810

#### MG GRAVES PROMOTED

Major General Ernest Graves, Deputy Chief of Engineers since July, 1977, has been nominated for his third star and appointed Director of the Defense Security Assistance Agency. He had served as North Central Division Engineer from December 1970 to December 1973.

## ALL ABOUT WATER



They don't call it a watermelon for nothing—its 97% water.

Even if you're a hard-as-nails fullback with the Los Angeles Rams football team, your body is 70% water. During a lifetime, you'll take in about 16,000 gallons of water.

Over 70% of the earth is covered by water.

If all the valleys and mountains on land and under the sea were leveled, water two miles deep would cover the entire earth.

In northern Chile, years may go by without so much as a drop of rain, but parts of India get over 400 inches a year.

You've heard of Niagara Falls? It's the world's third largest fall in water volume. Besides its beauty, the falling water is useful for generating electricity.

"Water power" is no idle phrase. Water flowing at 10 miles an hour can move rocks 10 feet thick. And look what water carved in Arizona—the Grand Canyon.

Water helps regulate climate. It absorbs heat in summer and releases it in winter.

Water is used over and over. It falls as rain, makes it way back to the ocean, is evaporated by the sun, and comes back down again as rain. This "water cycle" goes on and on, without end.

A birch tree releases about 70 gallons of water into the atmosphere each day, almost the amount a person uses each day in his home.

Source: National Wildlife Federation

## SIMPLE TAX RETURN

- A How much did you earn last year?
- B How much do you have left?
- C Send in B

### MISS HUDSON



Elizabeth Ann Ruyak was crowned Miss Hudson 1978 at the 25th annual Sno-Ball held 21 January at the Hudson House Inn. Her first public appearance as Miss Hudson was at the St. Paul Winter Carnival.

According to the Hudson high school newspaper, Beth is involved in such school activities as theatre, Raidaires,

sports, student council and choir. She is also an avid outdoors person. Beth is the daughter of Barbara and Jim (CO-C) Ruyak.

In observance of Engineer Week, February 19 through 25, a St. Paul District exhibit is on display in the Post Office lobby.

### Headwater Notes

(Taken from old Headwater record books)

6 October 1987

Mr. B.C. Finnegan, Grand Rapids, Minnesota

Sir:

I am directed by Captain Abbot to inform you that in order to reduce by April 1, 1898, Lake Winnibigoshish and Leech Lake to gauge readings of 3.00 feet and 0.90 feet respectively it will be necessary to materially increase the discharge from those dams and from Pokegama.

You are therefore instructed to have the following quantities released from the upper dams:

From Lake Winnibigoshish 1600cfs
From Leech Lake 1250 "
and on the 11th or 12th instant (or
earlier if a change will not interfere
with the drive of logs) increase
Pokegama discharge to 3,300 cubic
feet per second.

Very respectfully, Your obedient servant, A. O. Powell Assistant Engineer

#### SAME MEETING

Outer space colonization was the subject of the recent evening meeting of the Society of American Military Engineers, held 21 February at the Ft. Snelling Officers' Club. Dr. Arthur Harkins, of the Future Studies Section of the University of Minnesota, and Jerry Allen, President and founder of Criteria, Inc., provided provocative views for the local SAME membership of the state of the arts of space travel and colonization, along with slides and exhibits.

## BG NOAH VISITS DISTRICT OFFICE

Brigadier General Max W. Noah, Deputy Chief of Staff for Resources Management, Headquarters, Training and Doctrine Command (TRADOC) at Fort Monroe, Virginia, visited the District Office 13 February. BG Noah was the St. Paul District Engineer from August 1974 to January 1976.

BG Noah was in the area to visit his son who attends the Shattuck School in Faribault, Minnesota.

A coffee reception was held in his honor and he was briefed on activities in the District since his reassignment.



BG Noah accepts a memento of St. Paul District, a framed photo of the Source of the Mississippi, from COL Gay.

by Sharon Brown

"If you think, act and perform professionally, and make yourself valuable as a professional, no one will impede your progress." This statement typifies Joanne Catherman who has become well known for her expertise in the field of procurement. Within the last 12 months, she has been asked by North Central Division to provide contracting assistance to two different districts involved in snow emergencies. In February 1977, she was sent to Buffalo, New York, to assist the Buffalo District, and upon her return, she received many laudatory remarks about her performance. She has just recently returned from Michigan where she aided the Detroit District. Jim Braatz, our Public Affairs Officer who was also assigned to the area, reported that she was doing an outstanding job and that she had been highly praised for her knowledge and cooperative attitude.

Joanne began her career in Procurement and Supply in April 1969 as a GS-4 Procurement Clerk and is now a Procurement Agent, GS-9. She has taken full advantage of every available opportunity to achieve in her job, and it has paid off, both for herself and the Corps. She also serves as the Federal Women's Program Coordinator for the District, and rightly so. She has a strong desire to help other women realize their potential and she counsels and encourages them to use as much initiative as possible in pursuing a career. Joanne supervises five women and one of her employees responded when asked what she admires most about Joanne as a supervisor, "she is an achiever and she encourages us to be the same; she also stays alert for every opportunity to help her employees develop and to get more responsible jobs."



#### PERSONNEL OFFICER TRANSFERS 2 FEB

Mike Mullen, Personnel Officer in St. Paul District since January 1976, has transferred to the South Pacific Division office in San Francisco where he will serve as Personnel Management Specialist. A farewell luncheon was held on 2 February at Awada's.

#### 'GOING PUBLIC'



Thom Holden of the Duluth Marine Museum was featured on a news broadcast on KDAL-TV on 13 January, speaking about his research on a 1929 Isle Royale shipwreck. Marine Museum Curator Pat Labadie addressed the Delta County Historical Society annual meeting in Menominee, Michigan, on 12 January, and was interviewed by KDAL-TV on Sunday, 8 January, regarding the Visitors Center's programs and public services.

A letter from W. Daniel Svedarsky, of the Northwest Experiment Station of the University of Minnesota, to Mary Leykom, CO-GR, recently stated in part: "It was pleasant visiting with you on the phone today in regard to the feasibility of transplanting native prairie grass by conventional sodding techniques. Frankly, I was quite surprised that your agency would be involved in encouraging prairie restoration but I am very pleased that you are. It was also encouraging to learn of another application of the results of research so work that was initiated some six years ago when little attention was directed towards sodding as a prairie restoration technique..."

Carl Borash, ED-PB, is addressing the 5th graders at Linwood School in St. Paul on 24 February, to tell them about the role of the Corps in water resources management, particularly concerning our rivers.

Water Transportation Facts,

a publication of

The American Waterways Operators, Inc.

#### TUGBOAT - TOWBOAT

"Is there a difference between a towboat and a tugboat?" "Which pulls and which pushes?" "How big is a towboat?"

These questions are asked of river men constantly. Here are some interesting answers.

Only part of the difference is that one pushes and the other generally pulls. Towboats operate extensively in the nation's shallow draft inland waterways while tugboats, as a rule, do their work along the coasts and in the many deep water harbors.

Despite their name, towboats always push cargo, while tugboats can either push or pull theirs. The reason towboats push is simple: it is easier to control a group of huge barges from behind.

When as many as 40 barges (equal to the cargo space of 12 100car trains) move on a river in one tow which is almost 1/4 mile long, there has to be absolute control. With the use of strong cables, barges are lashed together to form what is actually a single unit. On the Upper Mississippi, the standard tow is three barges wide or 105 feet. The locks on the Upper are normally 110 feet wide. That means a captain has 21/2 feet on each side of the tow to clear the locks, and when space is that tight power and rudders in the rear make a crucial handling difference. The configuration of the bow of a towboat allows the vessel to saddle up to the barges for

powerful and direct pushing.

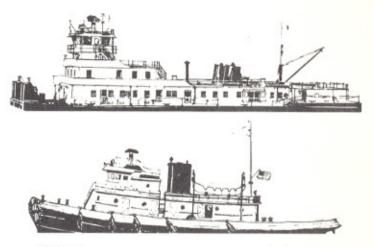
Often asked is why a boat that pushes is called a towboat. "Towing means to pull," it is pointed out. That's exactly right. Some river folklore maintains that the name "towboat" evolved from a very logical origin. During the early days of river transportation, cargo was moved by means of horsedrawn barges. The animals called "tow horses" - walked along a levee on the bank of the river called a "towpath." They were actually pulling or towing the barge. Then as now, the barges were called "tows." When powered boats began to replace tow horses, they naturally became towboats.

Tugboats represent another side of water transportation. A tugboat can more easily pull its barges because in coastal or ocean towing, there is much more room to operate. And with the rougher waters involved, a V-hulled standard bowed boat is safer and more efficient. Tugboats can be easily adapted to push, and their service to large ships in deepwater harbors is invaluable. Powerful tugboats also tow tremendous oil platforms to deep-sea drilling sites. In many areas of the country, tugboats are the main form of water workhorse. For example, the tugs in New York Harbor are famed for everything from fire-fighting to police work.

Both towboats and tugboats pro-

vide the country with energy-efficient, low-cost water transportation. Without unreasonable taxes.

they can continue to move huge tonnages of vital bulk commodities, benefiting the entire economy.



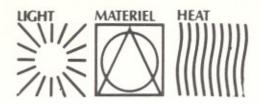
Tugboats				Towboats			
Length Feet	Breadth Feet	Draft Feet	Horsepower	Length Feet	Breadth Feet	Draft Feet	Horsepower
65 to 80 90 95 to 105	21 to 23 24 25 to 30	8 10 to 11 12 to 14	350 to 650 800 to 1200 1200 to 3500	117 142 160	30 34 40	7.6 8 8.6	1000 to 2000 2000 to 4000 4000 to 6000
125 to 150	30 to 34	14 to 15	2000 to 4500	190	54	8.6	up to 10,500

CROSSCURRENTS is an unofficial publication authorized under the provisions of AR 360-81, published monthly by offset press for employees of the St. Paul District. Views and opinions expressed are not necessarily those of the Department of the Army. Address mail to: CROSSCURREUTS. ATTN: Public Affairs Office, U.S. Army Corps of Engineers, St. Paul District, 1135 U.S. Post Office and Custom House, St. Paul, Minnesota, 55101. Phone: (612) 725-7505

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## **WASTE NOT**



#### THE HEIMLICH MANEUVER: A LIFE SAVER

You've just sat down to dinner and are into the main course when one of your companions begins to choke on a piece of food. He or she half-rises from the table, gesturing frantically at his/her throat, unable to speak...begins to turn blue...and starts to collapse.

If you panic, or even take the time to phone for help, your companion could be dead by the time assistance arrives. Whatever is going to be done, you—or someone else nearby—will have to do it.

The answer to this desperate situation is the Heimlich Maneuver, named for the doctor who developed it a few years ago. It's a method, which can be easily learned by almost anyone, for helping the choking victim expel whatever is obstructing the windpipe.

No equipment is needed, just a bit of knowledge and a cool head. The Heimlich Maneuver, which has been documented as saving hundreds of lives, can be used on either adults or children.

For the Heimlich Maneuver to be effective, you must first determine that someone is actually choking. Just because a person starts coughing at the table doesn't mean that person is choking.

Here are the three signs of real choking:

- 1) The person cannot speak or cry out;
- 2) His or her color turns blue;
- 3) He or she collapses.

If you detect these three signs, act quickly—or the person will die within four minutes.

#### HOW TO AID A CHOKING VICTIM

If someone with you begins to choke, do the following:

1. Open the person's mouth, reach into the throat with your fingers and try to remove whatever is obstructing the air passage. If you can't restore breathing this way, go immediately to Step 2.



2. This is the Heimlich Maneuver, and here is how to do it: a) Stand behind the victim and place one fist, with the thumb side in, against the vic-

tim's abdomen, below the rib cage and slightly above the navel. Reaching around with your other hand, grasp your fist firmly. You'll now have both arms around the victim from behind.

- b) Press your fist into the victim's abdomen with a quick, firm upward thrust.
- c) Repeat the action, if necessary, to force out the object that is causing the choking.

What the Heimlich Maneuver does is use air from the lungs to propel a foreign object from the windpipe. Remember, you don't hug, punch, or squeeze the victim. You use your fist to quickly press inward and upward on the abdomen. Don't squeeze with your arms or injury could result.

If the victim is lying on his or her back, or is an infant, you can do the Heimlich Maneuver by placing the heel of your bottom hand on the abdomen below the rib cage and above the navel, and making a quick inward thrust.

You can even do it to yourself, if you're alone and no help is immediately available. Just lean against the corner of a table or chair with the corner piece, chair arm, or whatever, against your abdomen where the fist would normally be, and force the "fist substitute" inward and upward with a rapid motion. It won't be comfortable . . . but consider the alternative.

Once you've restored breathing to the choking victim and dislodged foreign matter from the throat, be sure he or she receives medical attention to insure that there haven't been any complications from the choking or the emergency treatment.

One thing about inflation—it makes it possible for people in all walks of life to live in more expensive neighborhoods without even moving.

Middle age is when actions creak louder than words.

## AWARDS

The following awards were presented by COL Gay at an Incentive Awards Ceremony, 16 February, at 3 p.m. in Room 1220:

QUALITY STEP INCREASE Paul B. Seguin, ED-PB - \$609 increase

OUTSTANDING PERFORMANCE RATING & SUSTAINED SUPERIOR PERFORMANCE Donald A. Benson, ED-SU - \$250 James E. Kursu, ED-F - \$300

OUTSTANDING PERFORMANCE RATING Rita M. Langley, SP-P

SUSTAINED SUPERIOR PERFORMANCE Helmer O. Johnson, ED-H - \$300 Irvin E. Kerkenbush, L/D 5 - \$250

SPECIAL ACT AWARD Gerry D. Enger, ED-D - \$200 SUGGESTION AWARDS

MARGARET REILLY, OAS, was awarded \$50 for suggesting the installation of jacked telephones in the four District Office conference rooms. The increased convenience of telephones in meeting areas is estimated to result in annual savings of \$455.50.

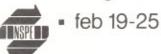
BEN WOPAT, CO-GR, was granted \$50 for suggesting the consolidation and simplification of the most frequently used permit conditions on a standard, pre-printed form to be inserted with the regular DA permit form.

MARVIN HRDLICKA, OAS, received \$90 for suggesting the use of a mechanical folding machine for scoring for the binding of cardboard covers of large reports, for an estimated first year savings in Reproduction Branch of \$874.80.

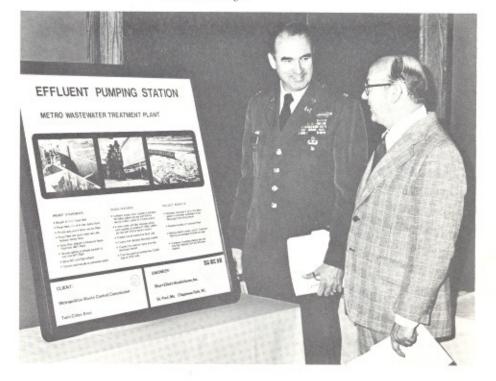
The District exhibit was set up in Maplewood Mall for the Boat and Recreation Show there on 2 through 5 February.



national engineers week



National Society of Professional Engineers



Colonel Forrest T. Gay, III, St. Paul District Engineer, and Richard P. Braun, Deputy Commissioner - Bureau of Operations for the Minnesota Department of Transportation, examine one of the nine entries in the 1978 Consulting Engineers Council of Minnesota (CEC/M) Engineering Excellence Awards competition. Winning entries were announced at the CEC/M awards banquet Friday, February 10, at the Registry Hotel, Bloomington.

Harry Andersen, EOP; John Seemann, ED-H; Courtland Mueller and Bruce Nelson, CO-LS (top);

Bill Stocker, CO-PO; Arnie Mervin, Jim Ruyak and Don Ward. CO-C; CPT Bill Carter, ED-DS (middle);

George Lindsay, Larry La Pointe and CPT Robert 16 Campbell, CO-C (bottom).

SEMINAR

"Here's the situation -above freezing temperatures which occurred late in February caused an increase in the density of the snow and this was followed by 1-inch of rain over the entire District ....

"Weather Service predicts possible flooding, and now high temperatures in southeastern Minnesota are causing partial melting of the snows ...

"What actions can we take? ...

What the flood fighters of the St. Paul District should be doing to prepare for emergency conditions this spring was the subject of the "Flood Fight Seminar" held by Harry Andersen, EOP, on 8 February.

On the basis of an educated speculation about possible conditions and developments, Harry Andersen had prepared a "scenario" of the situation through this late winter and early spring. The 25 or so personnel who would be responsible for flood fighting in various locations in the District were invited to comment on what precautions and preparations should be taken at each step. Discussion of advance groundwork, particularly as it related to funding, was a major question.

Colonel Gay pointed out to the assembly that "The flood fight takes top priority. Getting you ready is the key to fighting the flood. You must be prepared mentally, physically and logistically, like battlefield commanders, to meet the emergency."

John Seemann, ED-H, projected charts of advance survey of snow cover and water content of the snow and ice, and related the coordination which he has with the National Weather Service.

