

Crosscurrents

Vol. 5

No. 9

May 1982

New commander joins district in June

Col. Edward G. Rapp is selected by the Chief of Engineers, Lt. Gen. J.K. Bratton, to become the commander and district engineer of the St. Paul District in June.

Col. Rapp will replace Col. William W. Badger who is accepting another assignment.

Prior to this assignment, Col. Rapp served as Special Assistant for Mobilization and Readiness with the Office of the Chief of Engineers in Washington, D.C.

Col. Rapp received a professional degree in geological engineering from the Colorado School of Mines and master degrees in civil engineering and military art and science.

He is a graduate of the Army Command and General Staff College and the Industrial College of the Armed Forces. He is a registered professional engineer.

Col. Rapp's other staff and command assignments include serving as a staff officer and division chief of the Program and Analysis Directorate with the Office of the Army Chief of Staff at the Pentagon; section and branch chief of the U.S. Army Military Personnel Center in Alexandria, Va.; battalion executive officer and operations staff of the 20th Engineer Brigade in Vietnam; commander of an engineer battalion in Korea; commander of a cadet company in the U.S. Military Academy at West Point; and an engineer company commander in Hawaii and Thailand.

Among his military awards are the Bronze Star Medal (four awards), Meritorious Service Medal (three awards), Air Medal and Army Commendation Medal.

Col. Rapp was born in St. Paul, Minn. He and his wife, Trudy, have five children.



Col. Edward G. Rapp. (Photo by Lyle Nicklay, AS-P)

Inside this issue:

- * New command goals; p.3.
- * Special awards; p.5.
- * Annual summer picnic; p.20.

Toll-free hotline available

Motorists now have a hotline for car problems.

The Department of Transportation (DOT) has started a new program to give consumers more information about the safety of their cars.

The program involves the use of a tollfree hotline that permits consumers to call for automobile recall and safety-related information.

Here's how it works: Call the hotline number for your area and identify your car. You will hear computers humming and will be told of any recalls made on your car.

You will also be told that you will receive details of the recalls in the mail along with fuel economy ratings, crash test results, car maintenance figures and other information.

The toll-free hotline number is: 800-424-9393 (for continental U.S. only); 426-0123 (for residents in the Washington, D.C., metropolitan area only); and (202) 424-9393 (for residents of Hawaii and Alaska who must call at their own expense).

Health benefits open season set

The U.S. Office of Personnel Management (OPM) announced recently that an open enrollment period for federal workers and retirees in the Federal Employees Health Benefits Program (FEHBP) will be held from May 3 through May 28.

Enrollment changes will be effective on July 1 for retired personnel and on July 11 for most active employees.

The decision to hold an open season in the FEHBP was made following administrative hearings held by OPM in February.

OPM postponed the open season, originally set for Nov. 9 through Dec. 11, 1981, because of (a) legal questions which made final benefit and premium levels uncertain; (b) the unavailability of informational literature; and (c) concern about the financial stability of some carriers in the event of an open season under such circumstances.

During the May open season, active and retired employees will have the opportunity to change from one health plan or option to another, or move from a self-only enrollment status to a family status.

Employees who are not presently enrolled in the FEHBP will have the opportunity to enroll.

No transfer fee will be levied on those who change enrollment.

The next deadline for all articles to be submitted to Crosscurrents is May 24.

CROSSCURRENTS is an unofficial publication authorized under the provisions of the 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: CROSSCURRENTS, 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.

Commander Public Affairs Officer Editor and Photographer

Col. William W. Badger James E. Braatz Blanche H. Fong

Corps announces new command goals

by Terrence F. Wilmer

Extracted from "Engineer Update," Vol. 6, No. 4, April 1982; Office of the Chief of Engineers, Washington, D.C.

The Corps of Engineers has announced new command goals for the first time in four years.

The three new goals, established by Lt. Gen. J.K. Bratton, Corps commander, will supplement the five goals that have governed Corps operations since 1978.

The new goals are (a) support to the Air Force, Department of Defense (DOD) agencies and other elements of the federal government; (b) support to other nations; and (c) provision of leadership.

THE COMMAND OBJECTIVES

Along with his announcement of the goals, Bratton also approved major revisions to the command objectives that support them.

In a letter to all Corps elements, the chief of engineers explained, "Command goals and objectives are my way to communicate issues, concerns and priorities for you to consider in executing our mission responsibilities. They also provide unity of direction to our very diverse, worldwide operations."

Bratton said that he was discontinuing assignment of command-wide targets to objectives.

Instead, he called on Corps commanders to develop their own targets, after assessing their capabilities and resources. Such a practice, he noted, was more consistent with the Corps' decentralized management.

Another change to the program extended the life of the goals and objectives to two fiscal years, through fiscal 1983.

This, he explained, would give Corps elements more time to establish their own supporting objectives and oversee implementation.

THE COMMAND GOALS

Bratton said the new goal of support to the Air Force, DOD agencies and other elements of the federal government is to provide impetus to improve the design and construction role the Corps provides to such customers. The goal of support to other nations recognizes the Corps' responsibility to provide allied and friendly nations with top quality engineering and construction services, fully comparable to those provided on American military and civil works projects.

Bratton said that the new goal of provision of leadership is to ensure continuity of military and civilian leadership to guide the Corps, while keeping the nation's and the Army's interests foremost.

The other five goals included in the fiscal 82-83 program are (a) support to the total Army; (b) support to the nation; (c) development of the Corps workforce; (d) management of Corps resources; and (e) fulfillment of requirements with a quality product.

Armed Forces Day is May 15

by Gen. E.C. Meyer, Chief of Staff; and John O. Marsh Jr., Secretary of the Army

The U.S. Army is responsible for preserving and defending our great nation and the values upon which it was founded.

This no small undertaking. It requires well-trained soldiers who are willing to endure sacrifices above and beyond those required of the average American.

It requires modern and reliable forces capable of functioning consistently and effectively on any battlefield.

Our goal is to maintain "peace through strength." It requires enthusiasm, dedication hard work and an understanding of the dangerous world in which we live.

To meet this challenge, the Army must be prepared to go to war today or tomorrow, when and if the need arises.

This requires the courage, professionalism and leadership of each member of the active Army, Army National Guard, Army Reserve and the civilian workforce.

Today, Americans everywhere join together to pay tribute to the men and women who keep our nation safe and secure. They have entrusted to us the most sacred possessions--our freedom, our national honor and our security.

With your help, we shall succeed.

Vandalism causes costly problems for district

by Ben Wopat, EM

The week of May 10-14 is designated as Vandalism Prevention Week by the Corps of Engineers.

Vandalism is a costly problem which dates as far back as recorded history. It can be categorized as predatory, vindictive or wanton.

Wanton vandalism, which the Corps encounters most at its field sites, can range from damage resulting from the mischievious play of children to intentional destruction by individuals or groups.

It results in property damage for little or no apparent reason other than the dubious pleasure of the act of destruction itself.

Often, vandals themselves might not be able to explain their behavior.

INCIDENTS

The following list of incidents of vandalism is an example of this senseless destruction.

These incidents occurred at our field sites between July 1 and Sept. 30, 1981. This was, of course, the height of the recreation season when visitation is greatest.

A sodium light bulb was broken at Pine River (valued at \$45); security light globe broken at Pine River (\$35); two mirrors broken and roof damaged at L/D 10 (\$53.51).

Main gate struck by vehicle and damaged at Eau Galle (\$35); screen doors kicked in at Eau Galle (\$28); metal traffic counter box driven over at Baldhill (\$20).

Privy door damaged at Lake Traverse (\$10); dock anchors pulled out at Baldhill (\$21.50); partitions at comfort station damaged at Pine River (\$30).

Lawn torn up by vehicles at Blackhawk Park (\$75); drinking fountain pulled from wall at Pine River (\$30); two picnic table tops damaged by fire at L/D 3 (\$45).

Glass inclosure wall of telephone booth shattered at Pine River (\$57); employee backed government pickup into warehouse building, damaging door at St. Anthony Falls (\$150); toilet tissue holder broken at Lac Qui Parle (\$12). Seven guard posts knocked over at Lac Qui Parle (\$70); garbage can riddled with bullet holes at L/D 3 (\$25); security light broken at Pine River (\$35).

Two more picnic table tops damaged by fire at L/D 3 (\$45); and guard posts and lawn damaged at Blackhawk Park (\$45).

The total value of the damages amounted to \$867.

When viewed individually, incidents of vandalism may appear trifling or insignificant, but their cumulative effect is very costly in terms of dollars spent in repair, and in inconvenience and disruption to users.

PREVENTION

The prevention of vandalism is not a simple matter since it usually occurs when the facilities and sites are unattended.

Constant vigilance is probably the most effective method of prevention, but it is impractical to maintain 24-hour surveillance over our property.

We should, however, make both scheduled and unscheduled inspections of our areas of responsibility to assure that incidents of vandalism are discouraged.

Signs should be posted warning of the legal sanctions available to deter or punish vandals.

Also, the general public should be educated to the fact that acts of vandalism of public property are costly not only to the Corps, but are costs shared by all taxpayers.

We should seek the active involvement of the public in discouraging vandalism and in immediately reporting incidents to the proper authorities.

Such a partnership between the users of public facilities and the public employees would go a long way towards the realization of our goal of eliminating or significantly reducing the number and severity of acts of vandalism to government property.

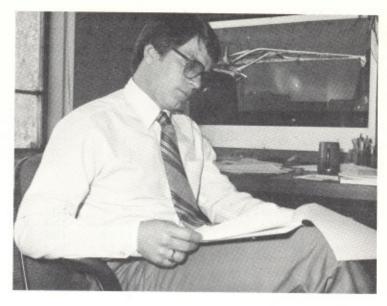
Outstanding achievement award goes to Miller

St. Paul District employee David J. Miller, a sociologist with the Economic-Social-Recreation Branch in the Planning Division, is the recipient of the 1981 St. Paul District Award for Outstanding Achievement.

Miller took great steps toward the incorporation of new, creative methododologies as standard procedure in social analysis.

He is also recognized for his efforts to integrate public involvement and social analysis toward the establishment of the public involvement program as an integral part of the Corps' planning and design functions.

Miller will receive the award at the district's annual summer picnic, on June 25.



David J. Miller.

Co-worker wins engineering excellence award



Charles E. Crist.

St. Paul District employee Charles E. Crist, a civil engineer with the Planning Division, is the recipient of the 1981 St. Paul District Award for Engineering Excellence.

The award provides honorary recognition to outstanding civilian employees in professional engineering positions reasonably early in their careers (between five and 15 years of federal civilian service).

Crist is currently directing the Red River of the North Basin Study, St. Paul District Water Conservation Program, Red River Main Stem Technical Study, Farmstead Ring Levee Feasibility Study, Basin Strategy Report, Basin Hydrologic-Hydraulic-Economic Modeling Program and the Technical Resource Service activities.

In addition, he is also presently serving as acting chief of the Plan Formulation Branch.

Crist will receive the award at the district's annual summer picnic, on June 25.

Co-workers in Planning Division relocate

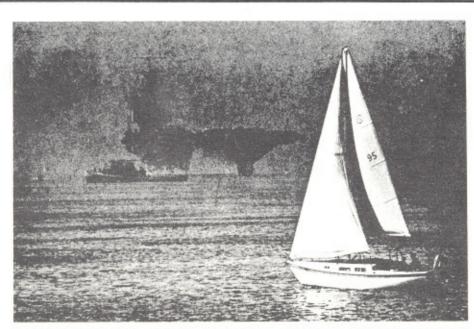
With the recent establishment of the Planning Division, many co-workers were relocated in early April.

For your convenience, their new phone numbers, office symbols and room numbers are as follows:

Office of the Chief

KOWALSKI, LOUIS	7571	PD	1225	
POST, ROBERT F.	7070	PD	12121	
LINDER, MARY KAY	7572	PD	1225	
Economic-Social-Recreation	Branch			
WORKMAN, CHARLES E.	7233	PD-ES	1204	
DIEDRICK, JAMES	7079	PD-ES	1204	
CHRISTENSON, DAVE	7559	PD-ES	1204	
FORSYTH, JAMES	7084	PD-ES	1204	
GAINES, SUZANNE	7079	PD-ES	1204	
GOLENZER, VERA	7850	PD-ES		
HEIDE, BRUCE	7747	PD-ES	1204	
HILDRUM, NORMAN	7079	PD-ES	1204	
HOLLERAN, JAMES	7771	PD-ES	1204	
MCGRATH, JEFF	7494	PD-ES	1204	
MCNALLY, EDWARD	7771	PD-ES	1204	
MILLER, DAVID	7494	PD-ES	1204	
ROONEY, JODY	7494	PD-ES	1204	
SNYDER, RUSSEL	7559	PD-ES	1204	
STAR, FRANK	7747	PD-ES	1204	
Flood Plain Management and	Small	Projects Brand	ch	
NORTHRUP, ROBERT L.	5901	PD-FS	1231	
BJORKQUIST, ALBERT M.	7380	PD-FS	1231	
COOK, KEVIN	7575	PD-FS	1231	
	7575	PD-FS	1231	
FORSBERG, ALAN	5885	PD-FS	1231	
SCHOMMER, MARY	7575	PD-FS	1231	
STENFORS, ROBERT	7138	PD-FS	1231	

Plan Formulation Branch			
CRIST, CHARLES	5942	PD-PF	1228
FICK, EDWARD	7577	PD-PF	1228
KOERNER, WAYNE	5980	PD-PF	1228
KUMMER, STAN	7295	PD-PF	1228
MCCLEERY, MARTIN	7284	PD-PF	1228
POWELL, DONALD	5943	PD-PF	1228
RASTER, TOM	7472	PD-PF	1228
SPYCHALLA, WILLIAM	5994	PD-PF	1228
STEPHAN, CARL	7472	PD-PF	1228
Environmental Resources	Branch		
KNOTT, WAYNE	5936	PD-ER	1205
ANDERSON, DENNIS	5936	PD-ER	1206
ANFANG, ROBERT	7854	PD-ER	
BEATTY, RICHARD	7574	PD-ER	1206
BERWICK, DAVID	7746	PD-ER	1208
BLACKMAN, ROBBIN	7632	PD-ER	1210
BLAYLOCK, SANDY	5934	PD-ER	1208
DEVENDORF, RANDY	7745	PD-ER	1210
DRALLE, DAVID	5935	PD~ER	1210
DRAZKOWSKI, BARRY	7632	PD-ER	1210
KITTLESON, JOHN	5935	PD-ER	1210
OKEEFE, MICHAEL	7632	PD-ER	
PALESH, GARY	7574	PD-ER	1206
PFUTZENREUTER, TERRY	7746	PD-ER	1208
SHYNE, JOHN	7854	PD-ER	
WAGNER, JEANNIE	7745	PD-ER	1210
WHITING, ROBERT	5936	PD-ER	1206
WILCOX, DANIEL	7574	PD-ER	1206
Reports and Communicati	on Branch		
KRUCHTEN, MARILYN	7997	PD-RC	1226
CHURCHILL, CORA	7565	PD-RC	
HENKE, JOHN	7565	PD-RC	1226
MURASKI, MARY	7576	PD-RC	1226
PREAM, LOIS	7997	'PD-RC	1226
QUISTAD, BECKY	7997	PD-RC	1226
THOMSEN, JAN	7997	PD-RC	1226
WALSH, MICHELLE	7997	PD-RC	
YANTA, JOE	7576	PD-RC	1226



Look out for the future. Buy U.S. Savings Bonds through the Payroll Savings Plan.

People

GET-WELL WISHES go to David Haumersen, ED, and Lyle Nicklay, AS-P, who were hospitalized recently.

CONGRATULATIONS go to the following new moms and dads: Sidney and Ronald Scott, SO, on the birth of son Alexander David on April 6 at 8 lb., $3\frac{1}{2}$ oz.; Patrick and Jody Rooney, PD-ES, on the birth of daughter Alexis Ann on April 8 at $7\frac{1}{2}$ lb.

DEEP SADNESS is felt on the death of former co-worker Francis Mertes, resident of Glendive, Mont., on April 9. He left the district in February 1970 from the Planning Division.

FOND FAREWELL and good luck go to the following who left the Corps recently: Greg P. Danner, CO-PO; Richard A. Burnham, CO-RF; Randall J. Piel, Hired Labor Forces; John H. Nimeth, Gull Lake; Joel T. Williams, ED-D; Jeffery McKinley, PD; Susan P. Lungstrom, CO-RF; Timothy M. Lembke, Gull Lake; Robert W. Carr, PD; Dwight D. Rebers, DO; Rose S. O'Connor, DO; Jeffrey J. Miller, DO; David S. Magee, DO; Peter J. Hoogenboon, DO; Wallace W. Burow, DC-F; Barbara J. Benedict, DO; Kevin L. Anderson, DO; Jerry M. Smith, PD; Scott A. Morris, CO-PO, Daniel L. Cramer, ED-D; Anne M. Weaver, EP-D (transferred to the U.S. Geological Survey); Yvonne S. Larson, PD (transferred to the U.S. Air Force); Theresa J. Magistad, PD; Donna Tucker, CO-RF; Spencer Duncan, CO-RF; Robert L. Odegard, AS-M; James M. Jones, DO; Dorthea K. Luhman, EP; Bert E. Menke, Pine River Dam; Robin L. Clark, Eau Galle River Lake; and Capt. Dale Mowry, L/D 1 Rehabilitation Project.

FOND FAREWELL and best wishes go to the following who retired recently: Hubert C. Drugan, a lock and dam operator with L/D 5A, on March 25 after approximately 28 years of federal service; and Florence M. Leseman, a word processing specialist with Planning Division, on April 2 after approximately 19 years of federal service.

A WARM WELCOME goes to Lt. Frank Grass, CO-RF; Lt. Lee Gazzano, DC-F; Capt. Douglas Gransberg, L/D 1 Rehabilitation Project.

Savings bond drive begins

by Lt. Frank Grass, CO-RF

The St. Paul District annual U.S. Savings Bonds campaign will be held May 17-21. During this period, you will have an opportunity to purchase savings bonds through payroll deductions.

A \$50 savings bond may be purchased for \$25. You may schedule your payment in different ways, such as \$5 for five pay periods, \$6.25 for four pay periods, \$12.50 for two pay periods or \$25 for one pay period.

Other savings bond denominations are available for purchase. A \$75 bond costs \$37.50; a \$100 costs \$50; a \$200 bond costs \$100; a \$500 bond costs \$250; a \$1,000 bond costs \$500; a \$5,000 bond costs \$2,500; and a \$10,000 bond costs \$5,000.

The savings bonds have an interest rate of nine percent compounded semiannually, with a maturity period of eight years.

Interim rates are also available. After one year, the bond earns 5.99 percent, compounded semiannually; and 8.5 percent, compounded semiannually, after five years.

The bonds may be registered in the names of individuals, whether adults or minors, in single ownership, coownership or beneficiary forms.

At your option, the bonds may be redeemed at any time after six months from the issue date at most banks and other financial institutions.

The difference between the price paid for the bonds and the redemption value is interest. It is subject to federal income tax--but not to state or local income taxes. But such reporting on your income tax may be deferred until the bonds are cashed, disposed of, or reach maturity, whichever comes first.

The bonds are also subject to other taxes, such as estate, inheritance or gift taxes.

Savings bonds are safe. If they are lost, stolen or destroyed, they may be replaced for free, as of its original issue date.

A canvasser in your office will contact you during the campaign week for purchasing savings bonds. For more information, call me at 725-7557.

Incentive awards

Sustained Superior Performance Award:

Mary Marx, CO-RF (\$250) Daniel Wilcox, PD-ER (\$250)

Quality Increase:

Mark Zimmer, ED-GH Gary Palesh, PD-ER

Special Act Award:

Margaret J. Peterson, ED, (\$150) for developing a system for coordination and communication within the clerical and administrative staff of the Engineering Division (ED), providing substantial typing to the ED reorganization study and furnishing overload typing support to prepare documents for the Fiscal Year 1983 district budget submission.

Florence Leseman, Theresa Magistad, Lois Pream, Jan Thomsen and Michelle Walsh, all from PD-RC, (\$150 each) for their efforts in providing overload typing support to the Program Development Office from November 1981 to February 1982. This work was done under a critical deadline and sent to North Central Division by express mail as soon as it was completed. Often little or no notice was given to do the work within a short deadline. This work was accomplished in an outstanding manner without sacrifice to the quality of their other duties.

Daniel Bartholic, PD, (\$100) for his performance in an outstanding professional manner at a level much higher than his grade from November 1980 through February 1982. He provided assistance to project managers of the former Advance Planning Section on the State Road and Ebner Coulees, Prairie Du Chien, Pembina, East Grand Forks, Grafton and Sheyenne River studies.

Kimberly Wick, PD, (\$100) for her performance in an outstanding professional manner with minimal direction from June 1981 to March 1982. She provided assistance to project managers in the former Advance Planning Section on various studies.

Suggestion Award:

Richard L'addusire, EP-E, (\$50) for an adopted suggestion which proposed that home addresses and telephone numbers be placed in Item 30 of the SF-50.

Jeannette Pream, CO, (\$50) for an adopted suggestion which proposed that the format for navigation notices be changed to reflect a more pleasing heading.

Jeannette Pream, CO, (\$30) for an adopted suggestion which proposed that some permit forms be preprinted using the standard conditions for Minnesota and Wisconsin.

Stanley Brown, Derrickbarge Hauser, (\$255) for an adopted suggestion which proposed a new method of prestressing the miter gates at each lock on the river. This new prestressing jack arrangement method is much safer.

Robert L. Odegaard, AS-M, (\$25) for an adopted suggestion which proposed the purchase of a new mail cart which is lighter in weight and much safer than the old cart.

Chess tourney ends season

by C. Giaquinto, ED-D

The 1980-81 St. Paul District Chess Tournament was recently completed with decisive winners in both divisions.

Winning the number one division was Al Ellingson, ED-GH, with $5\frac{1}{2}$ points out of a possible 6 points.

Winning the number two division was Joel Face, ED-GH, with a clean sweep of six for six.

Both divisions now have a traveling trophy that was purchased by the Employees' Benefit Fund.

Around the district

IN THE TWIN CITIES, Minn., Corps employee Doug Holmberg and a fellow Minnesota Boat Club member escaped serious injury on March 28 when their 36-foot rowing boat hit a log and were thrown into the icy Mississippi River. They clung to different sections of the boat to save themselves and were able to swim ashore after floating about a mile. The wreckage of the boat disappeared downriver. Both men suffered cold and exhaustion from the accident.

IN BLOOMINGTON, Minn., Col. William W. Badger, district commander, was a guest speaker at an American Society of Civil Engineers meeting on April 14. He discussed Corps flood control studies within the Red River of the North basin.

IN ST. PAUL, Minn., Brig. Gen. George R. Robertson was guest speaker at a Society of American Military Engineers luncheon on April 22. He spoke about the Corps' responsibilities in the design and construction of facilities for the MX weapons system in support of the U.S. Air Force.

IN MINNEAPOLIS, Minn., the 1982 Minnesota Military Achievement Awards will be presented May 12 at 7 p.m. in the Metrodome, prior to the Twins vs. Boston Red Sox baseball game. Awards will be given to representatives in the Minnesota Army National Guard and Air National Guard, 88th U.S. Army Reserve Command, U.S. Naval Readiness Command, U.S. Marine Corps Reserve, 934th Tactical Airlift Group and the U.S. Coast Guard Reserve. The public is invited to attend.

IN THE TWIN CITIES, Minn., the Armed Forces Day Open House will be held May 15 at the Minneapolis-St. Paul International Airport, near the U.S. Naval Air Reserve facilities, accessible from Highway 62 via 28th and 34th Avenues. The public is invited to attend.

IN HASTINGS, Minn., Lock and Dam 2 will be open to the public for tours on Mondays through Fridays, May 7 to 21, 8 a.m. to 3 p.m. For further information, call Glen Duren at 437-3150.

IN MINNEAPOLIS, Minn., St. Anthony Falls Lock and Dam will be open to the public for tours on May 21, 10 a.m. to 6 p.m. For more information, call Roger Worth at 330-5336.

IN MINNEAPOLIS, Minn., the Minneapolis Grain Exchange, 400 S. 4th St., will be open for tours on May 21, 8:45 a.m. to 10 a.m. The event is in conjunction with National Transportation Week. For more information, call 338-6212.

IN ST. PAUL, Minn., the National Transportation Day exhibit will be open to the public on May 23, noon to 5 p.m., at the Amtrak Station, 730 Transfer Rd. Trains from the past and present, model railroad display, light rail transit display and other exhibits will be available. For more information, call Steve George at 636-6167.

IN ST. PAUL, Minn., a farewell luncheon will be held on June 3 for Col. William W. Badger, district commander, who is departing for another assignment. All past and present employees are invited to attend. For more information, call Mary Rivett at 725-7501.

Hurry!

It's only days until the end of the St. Paul District 1982 Amateur Photographic Contest. Get the details from the Public Affairs office at 725-7505.

Around the Corps

IN LAKE OKEECHOBEE, Fla., and surrounding areas, fires of undetermined origin kept Jacksonville District personnel working around the clock for several days in late January. The Corps used pumps, helicopters, a tugboat with a barge, launches, bulldozers, sprinklers and other equipment to battle the fires. Rainfall eventually brought relief to the area.

IN KOREA, Corps of Engineers research and development personnel demonstrated a new explosive to the Korean army, in February. The explosive was developed by the U.S. Army Armament Research and Development Command. The Corps' Waterways Experiment Station developed the technique for using the explosive in combat. Korea is considering the purchase of the explosive.

THE KANSAS CITY DISTRICT was honored on April 2 by Chief of Engineers Lt. Gen. J.K. Bratton as the top achiever in the Corpswide energy conservation effort. The district reduced fuel consumption in the operation of its fleet of vehicles, conserved energy in Corps buildings and made savings through its solar heating projects. The district also received awards for its energy conservation effort during 1981 in a Kansas City, Mo., area competition which included federal and local government participants.

IN FORT RITCHIE, Md., the Baltimore District recently constructed a child care center for U.S. Army personnel. The facility can accommodate 85 children from six weeks to 12 years old. It is one of the first in a long line of such facilities scheduled for construction by the Corps over the next few years.

IN DULUTH, Minn., the U.S. Naval Reserve destroyer USS Lawe will be in port July 14-19. The vessel will be open to the public for tours.

THE COASTAL ENGINEERING Research Center (CERC) presently located at the Corps' Kingman complex near Fort Belvoir, Va., will be relocated to and consolidated with the Waterways Experiment Station in Vicksburg, Miss. Both Corps laboratories conduct research on coastal engineering and the consolidation at Vicksburg will improve efficiency and economy in operation. Of the

present CERC staff, a total of 98 positions will be transferred to Vicksburg, about 30 will remain at the Kingman complex to become a part of a general support element for other Corps activities there and the remainder will be eliminated or reclassified. The move is expected to be completed by the end of 1982.



Undertows

by Henrik Strandskov, CO-RF

With spring finally here, many people are thinking about doing some of the minor repair work around the house that has been put off all winter.

Some of you may even be contemplating a major job like finishing the basement, installing a new bathroom or trying to convince your husband that painting the trim is more worthwhile than going fishing.

However, even the smallest of these jobs can be frustrating if you lack the skill, knowledge or tools to do it right.

As a public service, I present the following tips to make your handyman chores easier and more enjoyable:

1. WHEN FACED with a major repair job, you must always ask yourself three questions: (a) should I hire a contractor; (b) should I do it myself; or (c) should I join a monastery in Idaho?

If you answer no to the first and last of these questions, then I pity our judgement. Heck, I'd join a monaster in Fridley, Minn., before I'd try to install a toilet.

SOME PEOPLE underestimate the importance of having the proper tools for the job at hand.

Obviously, you need hand tools. If no hand tools are available, you can probably get by with foot tools, but remember that every municipality has its own ordinances concerning their use. (Inver Grove Heights, Minn., is especially touchy about this, so be careful.)

- 3. IN WEST St. Paul, of course, anything goes.
- 4. FRIDLEY'S NOT bad either, if you don't mind all those strange monks wandering around contemplating their pipe wrenches.
- CHOOSING THE right-sized nails for a job is very important, unless you're painting the trim.

Your local hardware store can provide you with lots of good advice on nail selection. Be sure to specify whether you need finishing nails or not. (If you're just a beginner at home repairs, you'd better stick with starting nails.)

- 6. REMEMBER, the most important tool for amateur carpentry is a good hammer. It should be finely crafted, delicately balanced and weighted precisely to your requirements. If you can't find one that's just right, use a big rock.
- MANY PEOPLE ask about wainscoting and I don't blame them.

 ONE OF THE most common projects for the home handyman is to convert a portion of the basement into a family room or recreation room.

The first step is to panel the walls. To do this, you must clear a path to the wall so that it can be measured. This may take several days, but don't give up.

Once the paneling is installed, you are ready to hang up the black velvet paintings and the Hamm's beer sign with the revolving canoe and waterfall scene. And that's all there is to it!

9. WHEN PAINTING, remember these rules: Always position your ladder solidly on level ground. If this isn't possible, strap a big mattress to your back.

If you have a lot of birds in your yard, try to keep your paint can covered when not in use.

If your child tips a can of paint on the rug, consider moving to Fridley.

Care of brushes is very important. Always wash them thoroughly, store in a clean, dry place and take them out to dinner often.

Using a paint roller can save a lot of time, especially if you hire a professional painter to use it.

10. THERE'S NO substitute for experience, so try to marry someone who's related to an instructor at a vocational-technical institute.

Then invite him over a lot and show him the projects you've started. He will probably be so shocked at your incompetence that he'll finish the job himself to avoid embarrassment to the family.

 YOU CAN SAVE a great deal of money by doing minor plumbing work yourself. You can also destroy your house.

If you're courageous, though, and want to go through with it, remember to turn off the water in the basement before you start.

You can find the main water valve by using the path you cleared to put up the paneling. If the valve is covered by paneling, rip some out and cover the hole later with a black velvet painting.

12. REPAIRING BROKEN windows is easy. Just take out all the remaining glass and then tell people you have a secret cleaning solution that makes windows almost disappear.

(See page 12.)

A tornado can be deadly

A tornado is one of the most furious and devastating quirks of nature. Yet, by learning a few simple facts and taking the proper preventative measures, you can keep disaster from catching you unprepared.

BEFORE

When the skies look threatening, listen to the radio. The National Weather Service and the Severe Storm Warning Center track all weather systems with sophisticated radar and are usually able to give adequate warning of violent weather conditions.

When a watch is issued, listen to broadcast advisories; be ready to take cover.

It is wise to collect a battery-powered light and radio and have family members within earshot under watch conditions.

Also, take your car keys; should a tornado hit your area, your car may still be operable--but keys would be lost in the rubble.

Take an inventory of all your household furnishings and personal belongings.

In case of a tornado or other disaster, this inventory will be invaluable to you in settling your insurance claim. Make sure you keep your inventory in a safe place, like a bank safe deposit box.

DURING

You'll have no trouble recognizing an actual tornado!

It's a spinning, funnel-shaped cloud extending toward the earth from the base of a thundercloud. It sounds like the roar of hundreds of airplanes.

You'll probably get warning before that ominous sound approaches. Listen to the radio when the sky looks forbidding.

A tornado watch means tornadoes may be expected to develop.

A tornado warning means a tornado has actually been sighted.

For further protection, move to the southwest corner of your basement.

Get under a heavy table or workbench if possible.

If you have no basement, take cover under sturdy furniture in the center of the house.

If you're in an office building or school, protect yourself in an interior hallway on a lower floor. Avoid auditoriums and gymnasiums or other structures with wide, free-span roofs.

In open country, move away from the tornado's path at a right angle. If there is no time to escape, lie flat in the nearest depression, such as a ditch or ravine.

AFTER

Closely inspect your property, including automobiles, for damage. Report any gas leaks or electrical damage immediately.

If your home is damaged, get in touch at once with your insurance agent or company.

In the meantime, secure your remaining property to protect it from further damage or theft.

Take an inventory of the damage so you can file your insurance claim as soon as possible.

Notify your relatives of your safety. Local authorities may waste time trying to locate you if you don't send word.

Do not tie up the telephone lines if they are needed for emergency calls.

Cooperate in the general clean-up of debris. You are responsible for cleaning debris from your own property.

Undertows

(From page 11.)

13. HANGING WALLPAPER can be fun--if you're a real "sicko." If that's your idea of pleasure, then you might as well just get someone to hit you with a board once in a while; it's not as messy.

14. ONE FINAL note. Remember that your public library has many good books to help the do-it-yourselfer.

When you go there to check one out, get several good mysteries instead and go home and relax. You can always work on the house next spring.

'Corps family' sees co-worker through handicap

Sherrie Moran, editor of the Mt. Weather Bulletin, the Corps' Middle East Division newspaper, won an Army Journalist Award from the Office of the Chief of Public Affairs in March for the following story. The story was condensed by the author for "Engineer Update," Vol. 6, No. 4, April 1982; Office of the Chief of Egnineers, Washington, D.C.

The "Corps Family" is more than just a slogan to George Rouse, a project manager with the Corps' Middle East Division (MED).

The Corps employees at the MED Rear office near Winchester, Va., have played a big part in Rouse's nearly complete recovery from a skiing accident that left him paralyzed from the neck down.

The accident occurred in January 1981, when his ski caught on something under the snow and he went headlong into a tree. He was instantly paralyzed.

RECOVERY BEGINS

One vertebra in Rouse's neck was cracked and his spinal cord was bruised.

"When I hit the tree, it was like a super whiplash," he said. "It bruised the center part of the cord. The swelling of the spinal cord is what caused the paralysis."

He spent the next four months at the Center Spinal Cord Injury at the University of Virginia Hospital in Charlottesville and the Woodrow Wilson Rehabilitation Center near Staunton, Va.

His first movement returned after two weeks. "I started getting a little movement in my left arm," he remembers. "I could raise it, but it flopped into my face."

When he left the hospital after nine weeks to go to the rehabilitation center, he could wheel himself in a wheelchair, walk short distances with two crutches and feed himself.

ACTS OF FRIENDSHIP

At the center, he was in physical and occupational therapy from 9 a.m. to 4 p.m. every day.

He was expected to do everything that he could for himself. "Wherever you were going, you had to push your own wheelchair, even if it meant inching your way along. You had to dress yourself in the morning, no matter how long it took or how clumsy you were."

Throughout this time, Rouse was flooded with cards, phone calls and flowers from friends and co-workers, acts of friendship which he says touched him deeply and boosted his morale.

On a home visit, the office staff greeted him with "George Rouse Day" and many were on hand for a big birthday celebration that April when he turned 54.

Rouse was released from the rehabilitation center in May. At that point, he could walk on his own with crutches but his muscle strength was the equivalent of a four-yearold's.

WORKING OUT

Ron Paul, a former health spa instructor who works in MED's Foundations, Materials and Surveys Branch, offered Rouse his basement gym, equipped with body building and weight lifting equipment.

Rouse began working out with Paul three times a week, a routine they still follow.

"When we started, he couldn't get from the chair to the floor by himself to do the stomach exercises," Paul said. "Now he does five sets of sit-ups by himself."

On his first try at wrist curls, Rouse couldn't hold the bar. Now he's working with 15-pound weights. He's bench-pressing 95 pounds.

Paul describes his upper body strength as the equivalent of an average 40-yearold man.

"George has done it on his own," Paul said. "He makes sure we work out."

CORPS FAMILY

"I still have a long way to go," Rouse said, "for my hand coordination and particularly my right leg. I'm having a hard time getting it stable. The left leg is excellent, but there was more damage to the nerves to the right side."

"My goal is to be 100 percent, but I don't know if I'll ever have the dexterity in my fingers that I had."

He went back to work part-time last June and has been working full-time since January.

Club offers self-help program

by John Blackstone, ED-GH

I have long held the theory that there are two kinds of people in this world--neat ones and messy ones.

I've known couples who divorced over this basic question. He claimed he was neat while she still is obviously messy.

As for myself, I continue to make significant progress from messy to neat. This is to be expected because I grew up with one neat person and one messy person.

My dad automatically put everything in order. He used to organize the cereal shelf, mixing the Wheaties, corn flakes and Uncle Sam together. Yuck!

My mom is organized, but it sure does not look that way and if it wasn't for my dad, I think she would have organized herself right out of the house.

This is ironic because society generalizes that men can or ought to be messy and if a woman is messy, then there is something wrong.

This spring, Heinz, a man from Germany, stayed in my home for two weeks. He moved my postulate from a theory to a law of human nature with an interesting tale he told.

Heintz explained that he prefers an ordered living environment and from his point of view, his spouse is basically messy.

They were preparing their house for guests one day with neat and messy sparks flying.

Mr. Neat thought he had the battle won until Mrs. Messy came unglued from the pressure in a fit of tears.

Heinz had boxed himself into a corner, but he had a plan. Through the years, he and his wife had learned to have a quiet time during such trying moments, so they sat down to let the dust settle for 15 minutes with guests due in about half an hour.

After Heinz had apologized for his part of the problem, his wife had an interesting thought.

She said, "Heinz, you make order with no heart; I make chaos with heart."

This reflection can be used as an umbrella for all human endeavors, particularly a self-help program such as Toastmasters.

If we are not kind and generous, treating each other with heart, then a group such as the Toastmasters Club cannot survive.

I extend a cordial invitation to you to attend a club meeting on Thursdays at noon in the sixth floor PEDC rooms. Coffee will be served.

Handicap

(From page 13.)

As difficult as the past months have been for Rouse, the one memory he says he will treasure is the outpouring of love and support from his Corps family.

"There is no way I could ever express my gratitude to the people of the Middle East Division," he said. "Their interest is what kept me going. Without this kind of support, a person just couldn't make it on his own."

How much DOES it cost to drive alone?

ANNUAL COST COMPARISON DRIVING ALONE-RIDESHARING

ROUND TRIP COMMUTE MILES DRIVING ALONE (OWNING & OPERATING	Ž.		RIDESHA	RING OPTION	4S
	ONE PERA S)	CARPOOL		VANPOOL	
	AC & COS	2 PERSON	4 PERSON	9 PERSON	11 PERSON
20 miles	\$1,279	\$ 640	\$ 320	\$ 441	\$ 360
30 miles	\$1,919	\$ 960	\$ 480	5 491	5 401
40 miles	\$2,558	\$1.279	\$ 640	5 541	\$ 443
60 miles	\$3,837	51,919	\$ 959	5 842	\$ 526
80 miles	\$5,116	\$2,558	\$1,279	5 743	\$ 608

SOURCE: AAA - 1980 EDITION: YOUR DRIVING COSTS

- *1) Calculations based on owning and operating costs at 24.60/mile for an intermediate car. Operating costs includes, gasoline at \$1.22/gallon, oil, maintenance and tires.
- Figures obtained by multiplying 24.60 by daily commute distance by 260 work days per year.



Metropolitan Transit Commission 801 American Center Bldg. St. Paul, MN 55101 297-3792

Retiring means many changes

compiled by the Safety Office

What does mental health in later years mean? It means making the most of a wonder-ful opportunity by meeting new challenges.

Retirement means setting new goals and working toward them; learning to adapt to changing circumstances; choosing and pursuing enjoyable activities; and overcoming any changes that do occur.

A positive attitude and careful planning will help you to deal with the changes that aging brings.

PHYSICAL CHANGES

Keep mentally healthy by preparing yourself for physical changes. Many older people don't notice major physical changes until age 70 or 75. To catch any problems early, visit your physician regularly.

Physical changes may include declining endurance. There may be some loss of strength and muscular coordination. Your body is more easily injured and takes longer to recover, especially if you don't keep fit.

Another change may include increased susceptibility. Respiratory, cardiovascular and arthritic diseases are the most common health problems for older people.

Another change may include vision changes. A lessened ability to focus on close objects (farsightedness) and difficulty adjusting to changing light levels. The major dangers are glaucoma and cateracts.

Another change may include hearing loss. It's usually very gradual and fairly mild.

MENTAL CHANGES

Keep mentally healthy by preparing yourself for mental changes.

Mental changes may include slowed learning speed. Some people learn more slowly. This is often due to other problems, such as sight or hearing changes or loss of interest.

Another change may include memory loss. Minor forgetfulness is common. Writing things down and keeping a calendar can be a big help.

Some people (at least 15 percent) suffer from mental disorders which can be organic (physical cause) or functional (no known physical cause).

Organic disorders' biggest problem is lack of oxygen due to arteriosclerosis,

stroke, etc., which impairs brain tissue function.

Functional disorders, affecting thought and mood, may include depression (very common), loss of motivation and interest.

SOCIAL AND EMOTIONAL CHANGES

Keep mentally healthy by preparing yourself for social and emotional changes. Find new friends and interests to help you cope with any changes that may result.

Changes may result from retirement. After a long period of productive work it's common to feel less useful, to have time on your hands that you don't know how to enjoy.

Changes may result from personal loss. Death of loved ones and friends is the major cause of depression among older people.

Changes may result from loneliness. Commonly, more and more time is spent alone as loved ones die or move away, or when an older person relocates.

Changes may also result from new roles. Remarriage is a major question that many older people face. They may also take on a new role as a grandparent.

ECONOMIC CHANGES

Keep mentally healthy by preparing yourself for economic changes. Evaluate your finances to help you plan a budget that suits any changes in income.

Changes may result from limited retirement income. Social Security alone may not provide enough for a comfortable retirement.

Changes may result from escalating cost of living. Everyone is hurt by rising prices, but those on fixed incomes suffer most.

Changes may result from higher health care costs. Medicare or other insurance covers some of the costs, but you still must pay for deductibles and extra coverage.

Changes may also result from changing living patterns. Moving to a smaller home or retirement community, travel plans, etc., can affect your finances.

STAYING ACTIVE

Staying active is important to your mental health during retirement. The key is

(See page 17.)

Shiftwork affects your safety and health

compiled by the Safety Office

Shiftwork can affect your safety and health. That's because shiftwork interrupts natural body rhythms, especially when you begin.

Biological rhythms regulate sleeping and waking patterns, brain waves, breathing, blood pressure, etc. The most common body rhythm is geared to nighttime sleep and daytime activity.

Each person has different sleep needs and working patterns. Some people are more efficient at night, others work best during the day. Many people take a few days or weeks (or longer) to adjust to new patterns.

Some shiftworkers experience problems such as fatigue, decreased efficiency, slowed reactions, increased risk of accident and illness, disruptions in personal life and stress.

SPECIAL PROBLEMS

Be alert for special problems caused by shiftwork. For example:

* Unsettled sleep patterns. Shiftworkers often complain of not getting enough refreshing sleep. Sleep may be disturbed by (a) disruption of body rhythms and irregular meals; (b) noise of traffic, telephone, children, etc.; and (c) daylight.

* Disrupted eating patterns. Many shiftworkers eat irregular, cold meals and a lot of fast foods. Poor nutrition and disrupted appetite can result in digestive problems such as indigestion, constipation and ulcers.

* Poor physical condition. Irregular sleeping and eating patterns can cause overall health problems such as gastrointestinal diseases, frequent colds, feeling tired and run-down, and menstrual difficulties.

* Increased use of caffeine, tobacco, alcohol and drugs to get to sleep and to stay awake also affects the body.

* Interrupted social life. Shiftwork can cause stress by isolating workers from (a) normal family activities such as sharing meals and bringing up children; (b) sports, cultural and social activities; and (c) community activities such as political and school functions.

Dissatisfied people may be less efficient and more careless on the job.

GET ENOUGH SLEEP

For successful daytime sleeping, you'll have to establish new habits. Try to:

* Get family support. Talk things over so everyone understands how important it is for you to get uninterrupted sleep. Work out and agree on a schedule for quiet time.

* Sleep on a set schedule. Get ready for bed at the same time every day.

* Sleep in a quiet room. Block out sunlight and noise.

* Pay attention to comfort. Make sure the room is at a desirable temperature. Sleep in a comfortable bed.

* Relax before bedtime. Get rid of tension by reading, watching television or doing light exercise.

* Avoid using drugs. Don't drink too much coffee, tea or cola before bedtime because they contain caffeine, a stimulant. Avoid alcohol; it can interfere with restful sleep and can make you irritable. Don't smoke before bedtime; nicotine may keep you awake. Don't use sleeping pills; after prolonged use, they lose effectiveness, leaving you feeling tired and groggy.

BE SAFETY CONSCIOUS

You must be especially careful on shift work to avoid accidents.

* Have a safe attitude. Do each job carefully; plan ahead. Control feelings; don't let anger or frustration take over.

* Apply your knowledge. Know your abilities; don't try to do a job you're not trained for. Know your equipment, how it operates through the use of safety features. Know the rules and follow them.

* Use good judgement. Think before you act; don't be impulsive. Allow enough time; be realistic about how long the job will take. Use proper equipment; use the tool designed for the job.

WORK SENSIBLY

Follow these tips to help make your job safer.

- * Organize your work load. If possible do more demanding or difficult tasks early in the shift when you're most alert and efficient.
- * Take scheduled breaks. An occasional change of pace will make you feel better, less fatigue and help you maintain efficiency.

(See page 17.)

Shiftwork

(From page 16.)

- * Be alert for fatigue. Making mistakes, being forgetful and irritable may be signs you're getting tired or didn't get enough sleep.
- * Check ventilation. Poor ventilation can make you drowsy and increase the risk of accident.

* Use proper lighting. Inadequate lighting tires your eyes.

* Practice good housekeeping. A messy workplace invites accidents.

EAT WELL

Eating well will help you stay healthy and alert.

* Eat balanced, varied meals. Every day eat foods chosen from the four main food groups of protein, milk, fruits and vegetables, and bread and cereal.

* Eat wisely. Don't rush through mealtimes; allow time for digestion and enjoyment. Don't eat a heavy meal before bedtime. Don't skip meals. Eat meals at the same time every day.

* Choose nutritious snacks. Fresh fruits, raw vegetables and cheese are better for you than cookies, candy and doughnuts.

COMMUTE SAFELY

Remember to take care on the way to and from work. If you drive: drive defensively, stay alert, observe speed limits and share a ride.

If you walk or take public transportation: don't take shortcuts, avoid isolation, go with someone and stay alert.

YOUR SOCIAL LIFE

Don't neglect your social life. If you do things you enjoy on your time off, you'll be happier and safer.

Spend time with family and friends.

Take advantage of daytime hours. Many
public facilities, stores etc., are uncrowded during daylight hours. Traffic is
lighter too.

Remember to exercise. A regular exercise routine can improve your digestion and help you sleep.

Retiring

(From page 15.)

to pursue activities that are interesting and enjoyable to you.

Take advantage of recreation through travel, hobbies, exercise and senior centers.

Take advantage of volunteer activities. Older people have a lifetime of experience and wisdom to share with others. It can be put to use in social agencies, schools, churches and politics.

Take advantage of education and enrichment through adult education programs and cultural resources.

WORKING

Many people find that working after retirement from a first career has many advantages.

There are financial benefits. Even part-time work at lower pay than what was earned before retirement can help meet expenses.

There are personal benefits. Remaining productive helps many people maintain self-esteem and feel useful. Work also offers the chance to interact with others and make new friends.

PHYSICALLY FIT

Keep mentally healthy by keeping yourself physically fit.

Have regular physical exams even if you are feeling fine.

Eat a balanced diet. Keep protein, vitamin and calcium intake high enough. Limit calories because older people burn them off more slowly. Eat smaller, more frequent meals.

Get regular exercise.

Maintain proper balance of activity and rest. Pace yourself wisely.

FRIENDS AND FAMILY

Stay in touch with family. Even if you don't live near your children and grandchildren, it's the feeling that counts...and the contact through letters, visits and phone calls.

Enjoy friends and acquaintances. They can help maintain a sense of well-being and self-worth and combat loneliness, one of the biggest problems for elderly people.

1982 district-wide fishing contest underway

by Wilbur Walleye

Winter is over and the ice is finally off the lakes and rivers.

Now that the season opener has arrived, this year's committee is gearing up for the onslaught of entries.

The representatives of the fishing committee for 1982 are Wayne Koerner, PD-PF; Greg Eggers, ED-GH; Mike O'Keefe, PD-ER; Don Koehler, CO-RF; Dale Mazar, ED-M; and Tom Oksness, CO-PO.

There are presently 12 fish entered in this year's contest, so far. They include Robbin Blackman's 11½" perch; Gary Palesh's 12 1/8" perch (bonus points) and 9½" bluegill; Andrea Johnson's 8 3/4" bluegill; Stan Kumpula's 30½" muskie; Bruce Norton's 12½" crappie, 7 3/4" pumpkinseed and 25½" steelhead; Margaret Reilly's 14" crappie (bonus points); 0'Keefe's 7" pumpkinseed; Dick Beatty's 12½" crappie; and Dave Ballman's 26" steelhead.

HAVE YOU EVER WONDERED ...

...how much a fish cost? Would you believe \$1000?

That is how much Dave Ballman and Bruce Norton would tell you how much each of their four trout cost on a recent trip to Brule River, Wis.

While traveling near Spooner, Wis., during poor visibility, a non-fisherman ran head-on into Ballman's Pontiac.



In an effort to erase memories of the circumstances in receiving the Belly-Up Award, Dave Ballman took a break away from the office.

The two die-hard fishermen managed to limp into Spooner for an emergency alignment on the car.

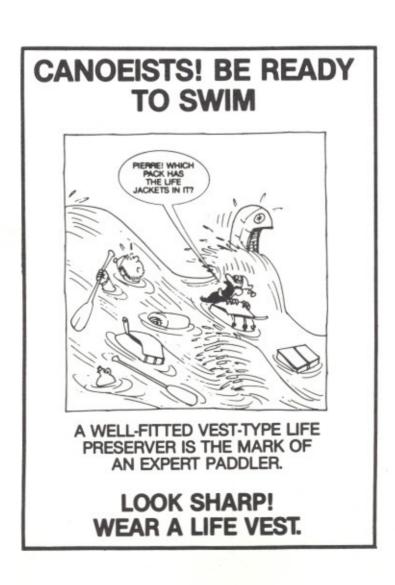
Then, they managed to drive back to the Twin Cities, Minn., grabbed another car and continued on their trip to Brule River.

To add insult to injury, this episode has earned Ballman the Belly-Up Award. Stu Dobberpuhl reluctantly relinquished the award to yet another deserving recipient.

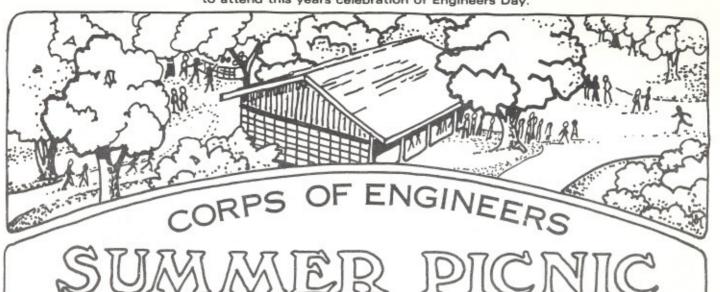


Compare fish entry to previous contest winners

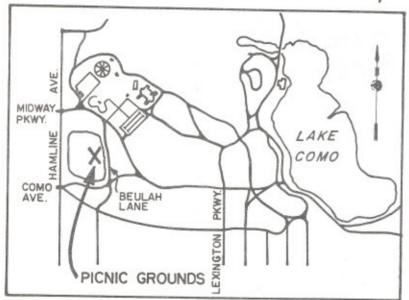
	1978	1979	1980	1981
Muskellunge	20 lb.	33 in.	35½ in.	42 3/4 in.
Northern pike	9 lb., 8 oz.	32 in.	44 in.	37 in.
Walleye	8 1b., 12 oz.	27 in.	27 in.	28 3/4 in.
Largemouth bass	6 lb.	21½ in.	19 in.	19½ in.
Smallmouth bass	6 lb., 4 oz.	17½ in.	20 3/4 in.	16 3/8 in.
Crappie	14 3/4 in.	14 in.	144 in.	14 7/8 in.
Bluegill	10 1/8 in.	9 in.	10 in.	10^{1} 2 in.
Pumpkinseed			8 3/8 in.	8 3/4 in.
Yellow perch	13 3/8 in.	11½ in.	12½ in.	12½ in.
Rock bass	10 7/8 in.	11 3/4 in.	11½ in.	13 5/8 in.
Rainbow trout	16 in.		$18\frac{1}{2}$ in.	18 in.
Brown trout	19 in.	20 3/4 in.	19½ in.	20 in.
Brook trout	14½ in.		14 in.	12½ in.
Salmon			$40\frac{1}{2}$ in.	40 in.
Lake trout			$31\frac{1}{2}$ in.	$32\frac{1}{2}$ in.
Bullhead	14 3/16 in.	12 in.	15 3/4 in.	14 3/4 in.
Catfish	20 in.	17½ in.	$30\frac{1}{2}$ in.	23½ in.
Sauger	21 in.	13½ in.	21½ in.	19½ in.
White bass	16 in.	11½ in.	15½ in.	15 7/8 in.



All St. Paul District Corps employees, their families and friends, and all retirees are cordially invited to attend this year's celebration of Engineers Day.



FRIDAY, JUNE 25th, AT NOON COMO PARK, ST. PAUL



STARRING DAY PRESENTATIONS ANNIIAI AWARDS

at 1:30 by District Engineer Rapp

Lunch, at 12:30, will include: Deep Fried Chicken & Swedish Meatballs Whipped Potatoes, Gravy, Baked Beans Cole Slaw - Jello - Potato Salad Italian Salad - Brownie - Coffee, Punch

BEER and POP WILL BE AVAILABLE

Tug-of-War, Volleyball, Horseshoes for the kids, Como Zoo and Rides ...

Tickets for lunch only...

Brown-Baggers Welcome!

FOR TICKET INFORMATION & RESERVATIONS CONTACT:

Chris Kroll, Room 905, Ext. 5991 Jan Pream, Room 1109, Ext. 7047 Mary Kay Linder, Room 1225, Ext. 7572

Debbie Peterson, Room 1315, Ext. 7957 Jan Graham & Jan Oakleaf, Rm. 1416, Ext. 7581 Sue Johnson, Room 1504, Ext. 7592 RETIREES and FIELD PERSONNEL, please contact Rosemarie Braatz, (612) 725-7552

Ticket Price: ADULT \$4.50, CHILDREN \$3.00

Tickets Available June 4

ALL TICKETS FOR PICNIC LUNCH MUST BE PURCHASED BEFORE NOON ON JUNE 18 No tickets will be sold after this time. Don't delay ... Don't miss out!

This picnic is brought to you by the 1982 Picnic Committee and the Employees' Benefit Fund