



# CROSSCURRENTS

ST. PAUL DISTRICT  
U.S. ARMY, CORPS OF ENGINEERS

Vol. 4, No. 9

MAY 1981

## The rebirth of Lock and Dam 1

by Blanche Hom, PA

The day began as a cool and windy morning on April 16 with the threat of rain hanging heavily in the air.

The tour group of Corps of Engineers employees from the St. Paul District office building slowly disembarked from the bus and huddled near the mobile trailers which house the temporary project office.

Blustery winds whipped up loose sand at the project site and swirled around the waiting visitors. Each visitor picked up a hard hat and adjusted its fit.

Walking with the tour guides, the visitors paused to look down into a gaping hole in the ground with enormous monoliths protruding from its depths. There was a flurry of activity as construction workers and machinery moved about. Huge barriers of earth, rock and steel surrounding the pit protected workers, equipment and structures from the onrush of the Mississippi River waters.

Lock and Dam 1 is being reborn.

Since the winter of 1979, the navigational facility has been undergoing major rehabilitative work generally on the landward lock and the riverward lock. The first objective is to improve the hydraulic operation of the locks which includes construction of new intake manifolds, lowering and modifying the filling and emptying conduits, construction of new discharge ports and new trenches, construction of new discharge manifolds and downstream lateral, installation of new reversed tainter filling and emptying valves, and removal of stoney valves.

The second objective is to improve the stability of the lock structures and dam which includes installation of post-tension anchors and steel sheet piling, and stabilization of the dam apron and the sluiceway monoliths.

The third objective is to extend the service life of the locks and improve operating efficiency which includes installation of new miter gate and valve operating machinery, jib cranes, tow haulage units, float-



Capt. James Scott (right) guided one of the tour groups.

ing mooring bits, fire protection system, compressed air systems, electrical controls for the valves and miter gates, signal and communication system, lighting, and grounding system; rehabilitation of miter gates, electrical power supply and distribution system, and the lock access road; replacement of electrical cables and wiring; construction of new valve bulkheads, central control station, service building, an elevated access bridge, sewage lift station, discharge line and water line.

The fourth objective is to provide added protection to the foundation beneath the lock structures which includes installation of flap valves and contact grouting.

The fifth objective is to improve the recreational and aesthetic resources at the lock which includes landscaping, installation

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# The rebirth of Lock and Dam 1

(From page one)

of new floating mooring facilities and a floating boom for recreational boat traffic.

The rehabilitation project, which has allowed the opening of the locks to boat and barge traffic during the navigation season, is designed to extend the life of the facility for another 50 years.

Many people and organizations, including the commercial shipping companies and pleasure boaters, are anxiously waiting for the spring opening of Lock 1. The riverward lock was scheduled for opening on May 1 and the landward lock on May 15.

The entire project is scheduled for completion in September 1982.

The Corps visitors carefully walked on makeshift walkways overlooking the two de-watered lock chambers, getting a bird's eye view of the construction activity.

After briefly looking around inside the central control station, the visitors hiked down into the pit to the area just downriver of one of the lock chambers. Even though the landward lock chamber was too wet and muddy for the visitors to venture into, the perspective of looking up the concrete walls was breathtaking. Indeed, it was a very rare opportunity to stand on the floor of the lock and peer up the walls. The steep yellow bluff which rises above the river could barely be seen.

Soon, the locks will become filled with water ready for boats and barges.

As the last of the visitors walked back towards the bus, they turned and took one more look at the incredible sight. They probably said to themselves, "I am impressed."

(More photos on page three)

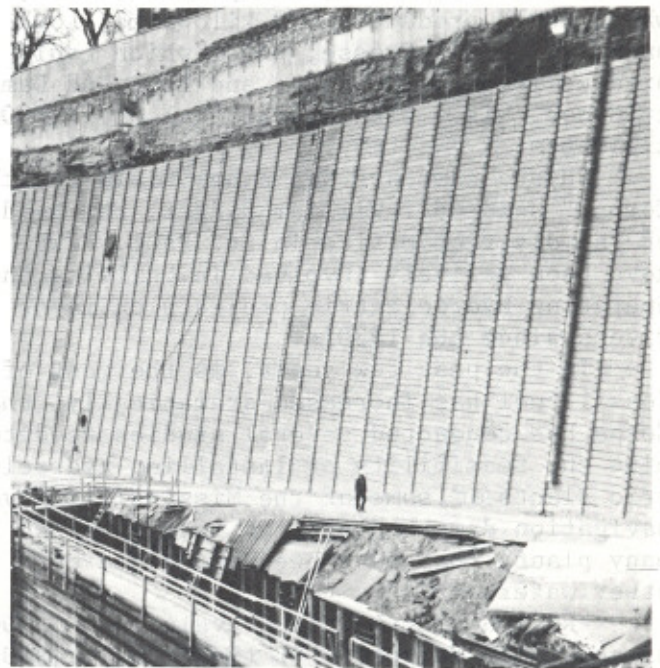


## The next deadline is May 22.

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Public Affairs Officer  
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The Public Utility Regulatory Policies Act of 1978 gives added impetus to development of hydroelectric dams by allowing

hydro plants at Jack and Jan S. Fountain Dam, Wis., which could produce 14,000 kilowatts; Jack and Jan S. Fountain Dam, Wis., which could produce 14,000 kilowatts.

(Photos by Blanche Hom, PA, and Lois Pream, ED-PB)

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# Mississippi dams attract hydropower studies

by Don Spavin

Text from the "St. Paul Sunday Pioneer Press," March 29, 1981; St. Paul, Minn.

A Corps of Engineers study indicates that at least some of the locks and dams on the Mississippi River between St. Paul and Iowa's northern border eventually will be used to produce electricity.

The study selected six of the 26 navigation dams between St. Paul and Alton, Ill., as possible sites for hydroelectric plants that could produce enough energy to serve 30,000 homes.

Corps officials are considering upgrading St. Paul's Ford Dam, which already produces 14,000 kilowatts of electricity, and regenerating Lock and Dam 2 at Hastings, which once produced enough electricity to operate lock machinery.

The Corps also envisions constructing hydro plants at: Lock and Dam 5, Fountain City, Wis., which could produce 14,000 kilowatts; Lock and Dam 6, Trempealeau, Wis., which could produce 7,400 kilowatts; Lock and Dam 7 at La Crosse, Wis., which could produce 12,600 kilowatts; and Lock and Dam 8 at Genoa, Wis., with a potential of 14,000 kilowatts.

"Hydro dams are not a new field for the Corps," said Col. William Badger, the head of the district office in St. Paul. "We have been actively involved in building and operating hydroelectric projects on major rivers since the 1930's.

In the past few years, as the cost of fossil fuel has increased dramatically, the Corps has conducted several studies to determine the feasibility of installing hydroelectric plants at some of the Mississippi River navigation dams and also of reactivating many plants that have been abandoned on other waterways.

"Nationwide the Corps evaluated 65,000 sites," said Badger. "Of the total, 1,900 were in the St. Paul District—from St. Anthony to Guttenberg, Iowa. We found 23 potential sites in Minnesota and 60 in Wisconsin" that could produce about 800,000 kilowatts of electricity, about 400,000 in each state.

To be classified as a possible hydropower site, a dam would have to be environmentally sound and would have to produce a minimum of 1,000 kilowatts of electricity.

"On the whole, this is not a large production," said Albert Bjorkquist, a Corps engineer. In comparison, Northern States



Albert Bjorkquist, Corps engineer.

Power Co.'s nuclear plant at Prairie Island produces about a million and a half kilowatts of electricity.

"Yet," said Bjorkquist, "use of this power could save millions of gallons of high-priced oil or tons of coal."

That savings, plus the fact that water power is clean is about all that makes hydro projects worth considering, the Corps said. In most of the Midwest there are not enough rivers with a sufficient drop, or head, to operate water turbines.

"Hydro power is a constant supply," said Badger. "And it is a renewable resource. Operation is simple and it is possible to fill peak demands simply by increasing the water flow through the turbines."

As developments in low-head turbines are made, more of the dams on the upper Mississippi River could be used, officials said. Corps engineers believe a seven-foot head, or drop, is necessary to operate turbines, but that figure is being reduced.

The belief is that eventually a four-foot head might suffice to turn the fins of a turbine. If that proves to be true, every dam on the upper river could be used.

"Of course, we know that not even hydropower is free," said Bjorkquist. "The cost of building a hydro plant is high...such plants must also be maintained and manned. No, hydroelectricity is not free; but it is clean, it is safe and its power is constant."

The Public Utility Regulatory Policies Act of 1978 gives added incentive to development of hydroelectric dams by offering

(See page five)

## Hauser a big gun in navigation

Text from the "Winona Daily News," Feb. 11, 1981; Winona County, Minn.

The Hauser is one of the Corps of Engineers' biggest guns in the yearly assault on silt buildup in the main Mississippi River navigation channel.

The derrick barge, based in the Corps' Fountain City, Wis., boatyard, was built in 1940, according to the Corps' chief district maintenance officer Dennis Cin.

"It's basically a crane barge," Cin said.

The Hauser, 46 feet wide with a hull running 66 feet, features a crane-operated shovel with a four cubic yard capacity.

The current crane, mounted in April 1958 is used to aid in Mississippi River dredging operations and can move an estimated 192 cubic yards of river bottom silt an hour.

The Hauser was instrumental in the Corps emergency operations in 1977 when a 200-foot channel was dredged to a depth of 12 feet to clear the way for river traffic at Reads Landing.

Each summer, the Hauser is involved in routine channel maintenance from St. Paul to Guttenberg, Iowa, a boatyard official said. Depending on the number of shifts assigned, the vessel's crew size varies from 30 to 38 members.

The Hauser returns to Fountain City each November before the main channel of the river freezes. Yearly maintenance checks are conducted while the vessel is fixed in the ice at the boatyard.

## Winter river traffic won't work

From the "Red Wing-Republican Eagle," April 1981; Goodhue County, Minn.

Opening the Mississippi River to year-round barge traffic would not be worth the cost of keeping the ice out of the navigation lanes during the coldest winter months, according to a study by the Corps of Engineers.

After 14 years of study, the Corps concluded it is unlikely barge traffic will increase on the Mississippi enough to pay the costs of keeping it open through the winter.

The study focused on the upper Mississippi, a stretch of 1,250 miles of navigable waterway from Grafton, Ill., north of St. Louis, to Minneapolis.

The Corps found winter navigation comes to a standstill during the mid-winter months because of ice on the river and problems caused by cold weather at riverside facilities.

At a news conference recently in Rock Island, Ill., representatives of the Upper Mississippi River Basin Commission recommended ways to expand the river traffic without extending the traffic season.

The recommendations include construction of additional locks in some areas to relieve traffic congestion caused by barges and recreational boats, according to Mark Johnson, a spokesman for the commission.

Other recommendations include different methods of clearing trash and ice from the lock gates and regulations governing staffing of barges.

## Hydropower studies

(From page four)

low-interest loans to pay 90% of the feasibility studies. And the act provides that individual companies or groups may use a government dam for installation of hydro plants.

Several organizations across the country are showing interest in building hydro plants on Mississippi River dams. Several Minnesota cities also are looking at the possibilities of getting a share of the energy produced by them.

Regardless of whether Mississippi River dams become hydroelectric plants, there is potential in Minnesota and Wisconsin for the production of "juice" from the flow of rivers.



# When a backyard garden becomes federal domain

by T.R. Reid

Text from the "Washington Post," April 7, 1981; Washington, D.C.

It was May of 1979 when the Corps of Engineers first informed Arnie Thomas that his backyard vegetable garden violated federal regulations.

"It was this guy Knapton from the Corps of Engineers," Thomas recalled recently. "He comes into my shop" -- Thomas is the proprietor of the Model Barber Shop in Appleton, Wis. -- "and he says, 'Hey boy, you violated section so-and-so of the such-and-such act and you better get that fill out of there! Or else you got to get a government permit.' And I says, 'Okay, how long does this permit take?' And he says, 'It's usually about three months.'"

In the 22 months since that conversation, Thomas has received visits, letters, forms and telephone calls from three federal, one state and two local government agencies. He has been assigned two federal case numbers.

He has been warned that his backyard may make him liable for civil fines up to \$25,000 and criminal penalties.

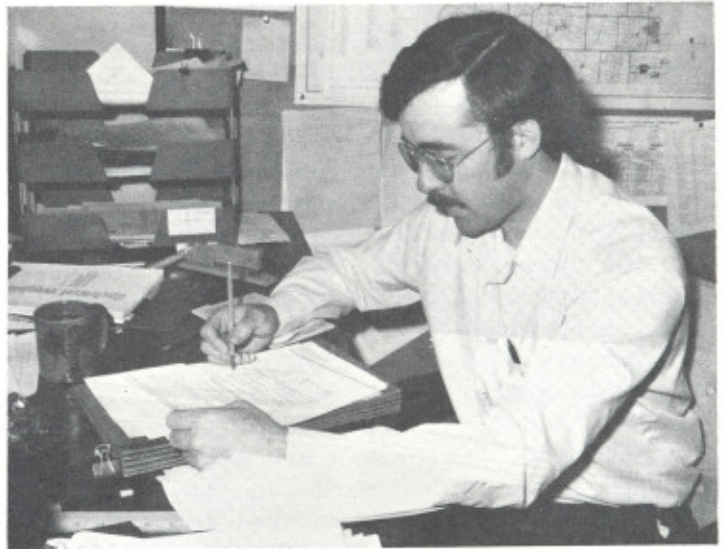
Gary Knapton, an investigator in the Corps' local field office, said "He filled in part of a protected wetland. If he can do it, then the neighbor fills in his eight foot, and the next one fills his eight foot, and in the end there's no wetland left."

Thomas and his wife, Ruth, live north of Appleton Lake and, for the most part, they consider themselves supporters of government regulation.

"When the Environmental Protection Agency (EPA) said all the houses on the lake had to have a sewage system," Ruth Thomas notes, "we never signed petitions to stop the project."

In a way, that sewage system was the source of Arnie Thomas' current woes. During its construction, the local sewer authority dumped excess fill dirt from the project in the swamp behind the Thomas home. Thomas leveled off the fill and planted grass, turning a rat-infested swamp into a small backyard.

Then Thomas decided to extend the yard out to the border of his property--an extra eight feet. Because he knew that government regulates land use, he asked his county zoning authority about his plans; the county said no government approval was needed for such a small project.



Don Kohler, Corps ecologist who is working on the case.

For \$150, a trucker dumped 50 cubic yards of soil into the swamp. Thomas planted more grass seed, started a vegetable garden, and made plans to build a small garage on the plot.

"We found out about it from the zoning commission," says Knapton of the Corps. "There's a law on this. Section 404 of the Federal Water Pollution Control Act. You can't discharge dredge or fill material on a wetland without a permit. The county may have told him different, but that's not the way the law works.

"We wanted him to take the whole thing out, but the sewer authority fill went in before the regulations took effect...For the strip he filled, I made an inspection and told him to take it out or else apply for an after-the-fact permit."

"After I got that (permit) application," Thomas says, "I tell Ruth, I says, 'We're just going to have to go down and get ourselves a lawyer.'...I mean, you're not going to believe this form they sent me!"

"The way you apply for a permit is all set by law," says Knapton. "We sent Mr. Thomas the application form, and when he sent it in, we sent it out for public comment."

The form Thomas and his lawyer filled out, "ENG Form 4345," asked 55 questions about the "project area," which Thomas answered as best he could. He certified that the swamp behind his home had no evident historical value and no "unique natural features." He said his new yard had caused no noise pollution and no emissions into the

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## Backyard garden

(From page six)

air. Asked about the effect on navigation, he noted that "there is no waterway on the project site."

The Corps sent notice of the application to "interested parties"--all except one were government agencies--and response began to trickle in. The Fish and Wildlife Service sent an inspector to the garden and then filed an objection to "this unauthorized fill activity." The EPA objected on grounds that "the cumulative effect of numerous small changes" can destroy protected resources.

Thomas' lawyer rebutted with letters from the three neighbors closest to the garden.

"The back part of his lot was previously filled with rubble," wrote Don Juedes, one neighbor.

"It was a breeding ground for mosquitos and rodents," wrote Les Foesch. "It is a residential lot," wrote Al Buhrandt, "I feel it will benefit all of the neighborhood."

"The neighbors' comments had some impact," says Knapton, "but I don't think they would have as much impact as a federal agency that can take an overall look at a situation."

On March 4, 1981, Thomas received a registered letter from the Corps. His new backyard, the Corps declared, "is not in the best interest of the public." Thomas could leave the first 40.71 feet of his yard (the sewage authority's contribution) in place, but the remaining eight feet had to go. The letter threatened "potential imprisonment, and monetary fines" if Thomas did not comply.

"This project cannot be permitted under the law," explains Don Kohler, a staff ecologist in the Corps' St. Paul District, where the case was handled. "There's no compelling reason for a person to have eight more feet of yard at the expense of the nation's waters...You can't let that kind of precedent be established."

"A wetland is what a lot of people would call a swamp," says Knapton. "It's the marshy area adjacent to a river or lake, and it serves an essential purpose. It cleans the water--filters out the nitrates, the pollutants that are going to show up in the lake if they aren't removed. Really, the place you need to preserve the wetland most is in a residential area. If you destroy it there, well, the lake has no protection."

Thomas declares that he has no intention of taking out the fill.

## Europe Division looking for people

A continuing high priority design and construction program in Europe holds a bright future for the Europe Division of the Corps of Engineers (EUD).

Headquartered in Frankfurt, West Germany, the EUD serves as the Department of the Defense construction agent in Europe.

Currently, EUD has about 1,000 projects under design or construction valued at two billion dollars. This workload has rapidly increased over the past few years and is expected to continue growing throughout the 1980s.

The EUD is looking for qualified applicants to fill positions which have become vacant as a result of the three to five year tour limitation on Department of the Army civilians.

Qualified applicants in the civil, mechanical, structural and electrical engineering disciplines; accountants; auditors; contract specialists; program and management analysts; and funds control specialists are now being sought for immediate employment or future consideration.

While most of the positions are located at the division headquarters, there are some openings in area or project office in the Netherlands, Turkey, and other cities in Germany.

A three or five year tour with the EUD not only offers a career challenge, but an excellent opportunity to travel and see the world.

A recruiting team will visit the following Corps of Engineers offices: Office of the Chief of Engineers, Washington, D.C., April 28; Norfolk District, Va., April 29; Mobile District, Ala., April 30--May 1; Fort Worth District, Texas, May 4; St. Louis District, Mo., May 5; Omaha District, Neb., May 6; and Seattle District, Wash., May 8.



# Nominees wanted in naming facilities

The following letter was recently received from Maj. Gen. E.R. Heiberg, III, director of Civil Works:

"In the past, when the Office of the Chief of Engineers (OCE) has had opportunities to name buildings, vessels, and other civil works facilities, we have selected a senior Corps civilian or military person to memorialize. This practice has left unrecognized the backbone of the organization, the many dedicated, lower ranking individuals who have served the Corps with distinction and who have sustained the Corps as one of the best agencies in government.

"I am, therefore, requesting from all Corps employees nominations of those individuals who meet the following criteria for consideration in the naming of a civil works facility, structure or vessel.

"The person must be deceased. The person must have been associated directly with one or more of the following actions: (1) saved one or more persons from severe injury or death in the line of duty; (2) acted to

prevent significant damages to the environment or manmade structures in an emergency situation in the line of duty; (3) developed an innovative technique or method which significantly enhanced the Corps' ability to perform its mission; or (4) worked for 20 or more years with the Corps with such dedication and outstanding service as to warrant memorialization. The person must have attained a military rank no higher than captain or a civilian grade no higher than GS-12 or wage grade equivalent.

"To assist me in screening and coordinating the nominations, I have established an Ad Hoc Committee in OCE to which all nominations should be sent. Once the committee conducts an initial screening, we will be soliciting more detailed information on the nominated persons with the appropriate Corps offices.

"By memorializing a heretofore unrecognized Corps employee, we will show our appreciation for the backbone of the workforce. I encourage you to search hard in your memory for people worthy of nomination."

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USE THIS FORM FOR SUBMITTING NOMINATIONS BY 31 MAY 1981

Dr. Robert Wolff  
Chairman, Civil Works Memorialization Committee  
Office of the Chief of Engineers  
DAEN-CWP  
Washington, D. C. 20314

Name of Person Nominated: \_\_\_\_\_  
First
Middle
Last

Corps Offices in which Nominee Employed (Complete to extent possible)  
Office
Years (19xx - 19xx)

\_\_\_\_\_
\_\_\_\_\_

\_\_\_\_\_
\_\_\_\_\_

Brief Narrative Describing Actions Which Qualify Nominee for Consideration:

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Highest Rank or Grade Attained with Corps: \_\_\_\_\_  
 Year of Death of Nominee: \_\_\_\_\_ (If Known)  
 Person Submitting Nomination: \_\_\_\_\_ Telephone: ( ) \_\_\_\_\_



## Looking for alumni members

The University of Minnesota Institute of Technology Dean's Office is looking for news of its former students or staff members. The office publishes a bimonthly newsletter for more than 15,000 Institute of Technology alumni, faculty and staff members and friends.

They would like to hear about where any of the alumni work, what their responsibilities are, their promotions and achievements, etc.

If you are an alumni, the staff of the ITems newsletter is interested in hearing from you. Contact the Office of the Dean, ITems Newsletter, Institute of Technology, 107 Lind Hall, 207 Church St. S.E., Minneapolis, Minn. 55455; phone 373-2447/8/9.

## Farewell lunch to be held

*by Mary Rivett, DE*

A farewell luncheon will be held on May 14 for Deputy District Engineer Lt. Col. Stephen E. Draper and Executive Officer Maj. Arthur J. McKee at the St. Paul Athletic Club, 340 Cedar St., St. Paul, Minn. All employees are encouraged to attend the luncheon.

Social hour begins at 11:30 a.m. and lunch will be served at 12:15 p.m. The menu includes Yankee pot roast, whipped potatoes, salad, rolls, beverage and dessert for \$6.75.

Make reservations with your timekeeper or call me at 725-7501 no later than May 11.



IN HIS OPENING REMARKS, Omaha District Engineer Col. V.D. Stipo informed attendees from St. Paul, Louisville and Kansas City Districts, North Central Division (NCD) and Ohio River Division (ORD) that the Omaha District (MRO) was embarking on a unique pilot program which would permit MRO to transfer functions to NCS and ORL upon mobilization. Host planners from MRO took their counterparts through the transition steps of converting from a civil works to a military construction mode, involving engineering, construction, procurement and supply, resource management and emergency operations. The two-day seminar was held in late March in Omaha, Neb. *(Photo courtesy of Omaha District)*



## Just between us

Congratulations go to David Raasch, ED-D, who was wed to Mary Jean Melstrom on March 28 in Prescott, Wis.

Get-well wishes go to the following who were hospitalized recently: Paul French, AS-G; Robbin Blackman, ED-ER; and Dale Lynch, ED-D.

Congratulations go to the following new parents: Carmen and Ed McNally, ED-ER, on the birth of daughter Megan McKenzie, 8 lbs., 6 oz., on Feb. 24; Tom and Becky Quistad, ED-ER, on the birth of son Dirk Aaron, 3 lbs., 6½ oz., on March 14; Sharon Pfeifer, CO-M, on the birth of son Jason; and Betti Rydl, DO-O, on the birth of daughter Kari Jo, 7 lb., 10½ oz., on April 19.

Sincere sympathy is extended to Jack Irwin, L/D 9, whose wife passed away recently.

Deep condolences are extended to David Haumersen, ED-PB, whose father passed away; Charles Malmer, ED-P, whose father passed away; James Adams, ED-D, whose mother passed away; and Courtland Mueller, Duluth Area Office, whose father passed away.

Congratulations and good luck go to Chester Hallmark, who was recently selected chief of the Geotechnical, Hydraulics and Hydrologic Engineering Branch.

Fond farewell and best wishes go to LeRoy L. Lorinser, AS-R, who retired from the Corps on March 27 after 39 years of government service.

Fond farewells and good luck go to the following who left the Corps recently: David C. Doll, Lake Traverse; Kathleen R. Hagen, CO-RF; David J. Glad, DC-F (transferred to the New Orleans District, New Orleans, La.); Gary L. Hoeft, Sandy Lake; Juan S. Duran, Gull Lake; Carol Cook, CO-RF; Margaret M. Krumholz, PA; Michael R. Phillips, AS-R; Michael S. Scott, Fountain City Service Base; Cynthia A. Karnes, Eau Galle River Lake; and Arnold A. Carlson, Hired Labor Forces.

## Let's get rid of the girl

*From the "Federal Affirmative Information Review," March 1981; Office of Personnel Management.*

Wouldn't 1981 be  
a great year  
to take one giant  
step forward  
for womankind  
and get rid of  
"the girl?"  
Your attorney says,  
"If I'm not here  
just leave it with  
the girl."  
The purchasing agent  
says, "Drop off your  
bid with the girl."  
A manager says,  
"My girl will get  
back to your girl,"  
What girl?  
Do they mean  
Miss Rose?  
Do they mean  
Ms. Torres?  
Do they mean  
Mrs. McCullough?  
Do they mean  
Joy Jackson?  
"The girl"  
is certainly  
a woman when she's  
out of her teens.  
Like you,  
she has a name,  
Use it.

## Your help is needed

*by Delores Sudeith, AS*

A Norelco salesman left a small hand-held tape recorder with someone in the office. The recorder was only for demonstration purposes. If you have it, please call me at 725-7519.

The district technical library is open Monday through Thursday. Please note that it is closed every Friday.

# Child care services planned

by Pat Westfall, ED-D

Do these situations sound familiar?

\* Summer is coming, school will be out and Leslie, a Corps employee, can't find a baby-sitter. The cost of a day care center is more than the family can afford.

\* Ronnie doesn't work, but often has appointments during the day, and has trouble finding someone to watch the children.

\* Nickie, a single parent, is taking a job-related course at night, and locating a sitter is a real problem.

Many Corps employees have experienced difficulty in finding reliable, convenient, affordable child care. Because of this, the Federal Women's Program Committee is interested in trying to establish a cooperative or nominal-cost child care referral service.

Family members of Corps employees could provide the child care service, either for a fee or in trade arrangements with other families. With summer coming, it's an excellent way for teenagers, grandparents or other family members to make some extra money.

If you are interested in providing child care services or in using the child care services, please complete and return the form located on this page, as soon as possible.

If you have any questions, call Judy Heutmaker at 725-7082; Cora Churchill at 725-7632; or Jody Rooney in the evening at 426-1128.

# Take fewer baths!

From the Federal Executive Board Energy Committee; Twin Cities, Minn.

Your water heater is the second largest consumer of energy in your home. You can lower that energy use by increasing the efficiency of your water heating system with a few simple maintenance procedures.

Keep the inside of the tank free of the sediment and lime deposits that can build up there. There's a faucet near the bottom of the tank for that purpose. Once every three to six months, open the faucet and drain the water until it runs clear. The frequency of the cleaning should depend on the mineral content of the water in your area.

Insulate the pipes that carry hot water throughout your house. The water won't lose as much heat as it travels through the pipes, and water left in the pipes will stay warm until the next time it's needed.

To use a minimum of hot water, take showers instead of baths. To see how much water you actually save by taking showers, plug and drain the tub the next time you take a shower and compare it to what you'd use for a bath. Unless you take extra long showers, you should be using much less water than you would for a bath.

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PLEASE MAIL TO: Pat Westfall  
Design Branch  
St. Paul District, Corps of Engineers  
1135 U.S. Post Office & Custom House  
St. Paul, MN 55101

\_\_\_\_\_ Should a referral service be initiated, I (or a family member) would be interested in providing child care services.

\_\_\_\_\_ Should a referral service be initiated, I would be interested in using the services for my children.

Name: \_\_\_\_\_

Phone number: \_\_\_\_\_

What is the best time to reach you? \_\_\_\_\_

# The Series EE

Saving has never been more vital for you— or for America.

Saving has always been a must for anyone who's looking for a secure future. Just knowing that there's a bit of money set aside takes away some mighty big worries, and lets you look ahead with confidence. Savings can keep a rough time from becoming a disaster—and make pleasant times that much happier.

And saving instead of spending is one way each of us can help to fight inflation. Particularly when you choose to save with United States Savings Bonds. With Bonds you're putting your money into a program that is the least inflationary source for financing government programs. You're helping to lessen the competition for money needed for the kind of industrial growth America must have to prosper.

Yes, saving, and buying Bonds, are good ideas these days. And if you buy your Bonds in denominations of \$75 or more, they are dated as of the first of the month in which half of the purchase price is accumulated—giving you a head start on your savings!

Let's look at some ways in which Savings Bonds offer particular advantages in preparing to meet education and retirement needs.

If you have college costs ahead, buy U.S. Savings Bonds in your dependent child's name (with you as beneficiary rather than co-owner). The first year, file a Federal tax return in the child's name, listing accrued interest as income. Under the Internal Revenue Code, up to \$1,000 in unearned (e.g. interest) income may be accumulated without a tax liability. Therefore, each of your children could own Bonds earning up to \$1,000 interest per year (assuming that the child has no other income) without subjecting the income to taxation. This first year's return establishes intent, and no further returns will be necessary unless income in any year exceeds the filing limitation established by the Internal Revenue Service.

As for retirement, two tax-saving options on Savings Bonds help make sure you'll be comfortable.

## HOW "DOLLARS FOR EDUCATION" GROW

If your Child's Age is:	Value* of EE Bonds at Age 18 through monthly investment of:			
	\$25.00	\$37.50	\$50.00	\$100.00
At birth	\$11633.46	\$17450.19	\$23266.92	\$46533.84
1	10464.84	15697.26	20929.68	41859.36
2	9384.30	14076.45	18768.60	37537.20
4	7461.64	11192.46	14923.28	29846.56
6	5818.16	8727.24	11636.32	23272.64
8	4413.26	6619.89	8826.52	17653.04
9	3789.32	5683.98	7578.64	15157.28
10	3215.38	4823.07	6430.76	12861.52
12	2204.00	3306.00	4408.00	8816.00

Comfortable Retirement  
vacations  
peace of mind

# Savings



# United States

You can cash Bonds as needed to supplement your retirement income, reporting the interest as income on your tax return. You will likely be in a lower tax bracket by then, and with a double exemption if you're over 65, so you'll have more of the money you've saved to enjoy.

Civilian employees could also realize tax savings by redeeming their Bonds during the "exempt" period when Federal annuity payments consist of money they themselves contributed to the fund.

Or you can produce income from your savings by trading your accumulated Series EE Savings Bonds for Series HH Bonds which pay interest as it's earned through semiannual Treasury checks. You need not pay tax on the accumulated interest on the Bonds you trade in until the HH Bonds are cashed, or reach maturity. This way you keep your principal intact, have a steady income for at least 10 years, and, when the HH Bonds are cashed, the tax will be at your post-retirement rate.

## A RETIREMENT PLAN THAT BRINGS YOU INCOME

Monthly Purchase for 15 years	Original Investment	Interest	Total Accumulation	Exchange for HH Bonds**	Monthly HH Bond Interest for 10 Years
\$25.00	\$ 4500.00	\$ 3885.28	\$ 8385.28	\$ 8500.00	\$ 53.12
37.50	6750.00	5827.92	12577.92	13000.00	81.25
50.00	9000.00	7770.56	16770.56	17000.00	106.25
75.00	13500.00	11655.84	25155.84	25500.00	159.37
100.00	18000.00	15541.12	33541.12	34000.00	212.50

\*\* Add cash to purchase the next multiple of \$500.

Yes, saving with United States Savings Bonds is a good idea today. So sign up for the Payroll Savings Plan. Or, if you're already signed up, take this opportunity to increase your rate of saving.

## HOW YOUR MONEY GROWS\*

Biweekly Savings	1 Year	3 Years	5 Years	9 Years	10 Years	15 Years
\$ 3.75	\$ 102.69	\$ 319.81	\$ 573.05	\$ 1228.37	\$ 1428.89	\$ 2716.14
5.00	137.24	426.84	764.34	1640.82	1910.38	3631.76
6.25	171.71	534.83	956.91	2054.69	2391.53	4546.74
7.50	205.68	640.48	1146.70	2463.70	2868.32	5453.04
10.00	275.06	856.84	1533.50	3292.54	3833.26	7287.06
12.50	344.00	1071.88	1918.88	4121.80	4798.40	9122.08
18.75	516.00	1607.82	2878.32	6182.70	7197.60	13683.12
20.00	550.19	1714.23	3069.45	6594.75	7676.74	14592.86
25.00	688.90	2146.72	3843.82	8257.04	9612.36	18272.38
31.25	860.90	2682.66	4803.26	10317.94	12011.56	22833.42
37.50	1033.35	3220.08	5765.73	12385.56	14418.54	27408.57
50.00	1377.80	4293.44	7687.64	16514.08	19224.72	36544.76

Monthly Savings	1 Year	3 Years	5 Years	9 Years	10 Years	15 Years
\$ 6.25	\$ 75.82	\$ 242.08	\$ 434.46	\$ 935.04	\$ 1088.98	\$ 2068.96
7.50	91.32	291.04	522.64	1124.20	1309.84	2488.50
10.00	121.64	388.74	698.52	1505.16	1752.94	3331.02
12.50	152.46	486.42	873.96	1882.20	2192.10	4164.96
18.75	228.69	729.63	1310.94	2823.30	3288.15	6247.44
20.00	244.24	779.17	1402.08	3020.71	3518.32	6685.10
25.00	306.00	977.40	1758.32	3789.32	4413.26	8385.28
31.25	382.23	1220.61	2195.30	4730.42	5509.31	10467.76
37.50	459.00	1466.10	2637.48	5683.98	6619.89	12577.92
50.00	612.00	1954.80	3516.64	7578.64	8826.52	16770.56
62.50	764.46	2441.22	4390.60	9460.84	11018.62	20935.52
100.00	1224.00	3909.60	7033.28	15157.28	17653.04	33541.12

\* The interest rate may be increased as authorized by law. The rates for new Bonds or for future extended maturity periods could be lowered, depending on market conditions. Bonds presently mature in nine years. Extensions beyond that period are shown to indicate interest accumulations should the life of the Bonds be extended.

# Bonds





IN HONOR OF SECRETARY'S WEEK, April 20-24, many of the St. Paul District's clerical employees were given special gifts like lunch or flowers. One special treat was a serenade by a singing duck which was hired by the Geotechnical, Hydraulics and Hydrologic Engineering Branch for (from left to right) Amy Gabbert, Jan Oakleaf, Jan Graham and Sue Johnson. The lyrics to the song are printed in this issue of Crosscurrents.

## A Quackiegram

A Quackiegram for JanJanAmyandSue on the occasion of this secretary's day today the twenty-second of April 1981:  
 Hello Jan Jan Amy and Sue...I was just waddling thru  
 Passing your way...just to say...happy secretary's day!  
 I thought and thought and thought...and finally thought "Why not?"  
 So I flew over here to wish you cheer  
 'Cause there's nothing going on in Minot!  
 Oh! Hello Jan Graham...yes I know your name  
 You really like being an engineer you drive an hour just to be here!  
 Hey there Jan Oakleaf...when we're naked and starving  
 you'll be our relief  
 Yes we know you bake, quilt and sew so you're warm when the old snow blows!  
 And I'm pleased to meet you Amy...you're so smart you shame me  
 You're going to college and riding horses  
 I'm sure you'll sail thru all your courses!  
 Oh Gol! I almost forgot Sue...she's got a bet she'll get a bunch  
 of stuff sewed  
 The steaks are lunch but she'll win I have a hunch  
 her softball team will come to her rescue!  
 Yes Jan Jan Amy and Sue...I hear your files all over are strewed  
 A follows Z and B's after C but the guys from DC will forgive you!  
 I was sent by the people of  
 Geotechnical Hydraulics and Hydrology...  
 who thought you'd appreciate all a me  
 Like they appreciate you yes they do each of you does the work of two!  
 That's all I came to say and in a minute Ill waddle away  
 But just for luck from your secretary day duck  
 I'll give each of you a great big hug...oh yeah!

# Heritage Toastmasters Club

by John Blackstone, ED-GH

Recently I met with a family counselor, not because I am crazy although some would dispute that contention and sometimes I wonder myself, but because this man could give me some tools that will help me deal with life.

Ray is an extremely interesting person and he was the original 90-lb. weakling. I believe him because he is a slight man who looks like he couldn't fight his way out of a wet paper bag. I heard him speak about himself at my church a while back. He had everyone rolling in the aisles. He is an extremely funny man!

During our conversations, I could just feel that he enjoys life to its fullest. He is, to put it quite simply, the kind of person who I hope some of whatever he's got will rub off onto me. Despite his size, he is a giant among the people I know.

There is one curious philosophy which Ray has that many head shrinkers, nut doctors and others of that ilk don't always possess. He believes that the fewer times he can see you, the more good he is likely to do you.

Now, that is a new twist on head shrinking. Think about it. Most counselors would like to have people coming back for session after session, ad infinitum. This guy says, "I'll see you once if I really need to, if you push me, I'll see you again."

This phenomenon is not totally unheard of in modern society, of course. Can you imagine taking your car to the local repairman? He says, "Well, Mr. Johnson, this car has a recurring bumper bolt affliction. You

will need to bring it in at least once a week until I can get your pocket book emptied."

I am not making fun of psychoanalysts; it is a serious matter and in many cases take more than one or two sessions.

The issue for me is how and where do I get help to tackle the problems I am presented in life. If I believe that the solution is a complicated ongoing struggle, I am not quite so apt to attempt to resolve it.

However, if I believe that a few minor adjustments will put me in tip-top condition and leave me ready to jump into life with renewed resolve, then living becomes a series of small problems that I can take great joy in untangling.

One place to get that minor adjustment of ego that will send you on your way ready to take a bite out of life is Heritage Toastmasters Club. One thing that we believe in at Toastmasters is giving you the tools to improve yourself. We believe that if you have the tools, then you can make mature decisions about where you want to go in life. We believe that you can use the resources available to become a better person; in fact, it is our goal to provide this environment.

Nothing delights us more than to find out that someone has found a better opportunity somewhere. We had two people leave us in the last year; we were sad to see friends go, but delighted to learn of their good fortune.

This leaves us with a minor problem. We need new bodies to replace the missing. We invite you to become part of the upward mobile society at our next meeting on Thursday, in the sixth floor PEDC rooms.

## Toastmaster is honored for his efforts

Heritage Toastmasters Club is pleased to announce that Harold Masem has been selected as the Central Division Toastmaster of the Year. Harold, who served as Club Mentor during the early formation stages of the local club, has continued to be an active club member.

Harold is a highway engineer with the Minnesota Department of Transportation.

He will be competing with Toastmasters from five other divisions for the District 6 Toastmaster of the Year award. Good luck in your endeavors, Harold!



Harold Masem

(Photo courtesy of John Blackstone)



FEELING PROUD AND HONORED is Lloyd Mathiesen (right) who was officially commended for his work at Eau Galle Dam and Recreation Area, Spring Valley, Wis. Presenting the award to Lloyd on March 2 was Mississippi River Project Office area park manager Milton Roppe (left), who has since retired from the Corps. Lloyd assumed responsibilities of park manager for several months during the summer of 1980 when park manager Stan Anderson was hospitalized. Stan has since retired from the Corps and was replaced by Thomas Novak. *(Photo courtesy of Thomas Novak)*



WITH WARM GREETINGS, Maj. Leslie J. Sweigart (right) was welcomed to the St. Paul District by Executive Officer Maj. Arthur McKee. Maj. Sweigart briefly visited the district in late April; he will become the district's new Executive Officer this summer.

MEN - WOMEN

**Here's the quick way  
to get started  
in a career.**



The "quick way" to get started on a career is through Army Reserve job training. A few short months from now, you could be earning good civilian pay (in addition to Reserve pay for the 16 hours a month and two weeks Annual Training you put in) in one of these fields:

- Transportation • Law Enforcement • Auto Repair
- Food Service • Communications • Medicine
- Finance • Personnel • X-Ray Technology
- Pharmacy • Carpentry

If you qualify and your local unit has the opening you want, this could be the smartest move you'll ever make.

**Call Army Reserve  
Opportunities**

**Part of What You Earn is Pride.**

An Equal Opportunity Employer



# A visit to Corps recreation areas

by Pam McFaden, PA

"The longest journey starts with just one step," said Tao Te Ching. (From the Minnesota Walkbook, Vol. 1, by James W. Buchanan.)

Need a place to relax and unwind? Or maybe a place for sightseeing, hiking, fishing, camping or any other activity? Come with me to the west as I show you how you can accomplish any of these!

First of all, we'll cross the wild sands of southern California and call upon the whispering pines and roaring surf along the rugged California coastline. Then we'll explore the Rocky Mountains that jet out from the flat plains to the east, and behold a panorama of blue sky, evergreen-covered mountains, and magnificent stands of timber. We'll also travel the rushing streams of the Pacific Northwest and fish from its crystal clear waters.

Come with me to California! For the fisherman and picnicker, try Carbon Canyon, Eastman Lakes and Fullerton Dam; whereas Hensley Dam provides camping, hiking trails, fishing and water skiing. Of course, if horseback riding or golf is your fantasy try Brea, Hansen, Mojave Rivers, Sepulevda Dams and Santa Fe Lake. For those interested in the history of the land try Medocino and Isabella Lakes.

Now, I'll take you on a journey into Colorado where you'll find Chatfield Lake which is popular for its winter activities such as snowmobiling, ice fishing, ice skating, ice boating and cross country skiing. Or if you prefer to go in the summer you'll have fun sailing, horseback riding and bicycling. Or you can go to Cherry Creek Lake with its skeet range, archery, rifle range and dog training areas. If that doesn't do it for you, you can always go to the John Martin Reservoir where you'll find the Santa Fe Trail.

If your line is trout fishing come with me to Idaho, to Albeni Falls Dam (Pend Oreille Lake), where forests and mountains, clear water, sandy beaches and excellent trout fishing are a few of the many attractions. You can also go to Dworshak Dam where the world's largest steelhead trout hatchery is located.

Now I take you into Montana where you'll find Fort Peck Lake with the buffalo, elk,



deer, antelope and small game that abound this area. It also has the largest fossil beds found in the world. There is the Libby Dam (Lake Koocanusa), location of a national forest in the wild and scenic section of northwest Montana.

As I take you into Oregon, you'll find many scenic lakes such as Cottage Grove, Blue River, Cougar, Detroit, Dexter, Dorena, Fall Creek and Lookout Point Lakes. This is where you can enjoy fishing, camping, hunting and other recreational activities.

Once in Washington, I'll take you to Chief Joseph Dam (Lake Rufus Woods) where you'll find a historical museum, or you can go to Hiram M. Chittenden Lock where you can see the famous seven-acre gardens and hike a national recreation trail. Of course, if you'd like to view the fish ladders, come to Lake Washington Ship Canal and Regional Visitor Center and Little Goose Lock and Dam. Some other places to visit are Lower Monumental and Mud Mountain Dams, or Mill Creek and Wynoochee Lakes.

Now that I've taken you through the west and if you decide to take a vacation there, I hope that you'll have fun!

(Photo from the "Lakeside Recreation in the West," EP-1130-2-415, October 1980)

# "Does sex make a difference in

by Sandra L. Davies

From the "Professional Engineer," Vol. 51, No. 1, March 1981; National Society of Professional Engineers, Washington, D.C.

Monday morning, 8 a.m. Frank paused in front of his office mailbox. On top of the stack lay a hastily penciled note from his boss, manager of the New Product Engineering Design group. "Frank, finally we've found just the candidate to fill the vacancy on our Ferit-X design team. Pat Brown is a new graduate and an excellent student with fiber optics design experience."

"All right. It's about time," thought Frank. "One more competent engineer will make this project fly and put us back on schedule." He strode to his boss' office, rapped once on the door and stepped in. "Frank--good--you got the message. Meet Pat Brown, your new design team member." Frank turned and found himself face-to-face with a dark-haired young woman.

Finish the story; create the rest of the scenario. What do you think? Does it make a difference whether or not the real-life Pat Brown is male or female?

The background. Four years ago the Institute of Technology at the University of Minnesota supported the creation of a new class titled, "Women and Careers in Traditionally Male Fields." An awkward title; a powerful class. Each session brought together the student group with three women who were professionals in many different occupations in which women represent a distinct minority.

I had the privilege of developing the class, interviewing each of the guests individually and facilitating lively discussions that followed the interviews.

That one class provided a major information source for this article. Two other sources stand out as important.

First, from 1970 until 1977, I directed my professional research endeavors toward women in science and engineering. My doctoral thesis was a follow-up study of women who entered engineering and science at the University of Minnesota over a 10-year period.

A later research project tied the efforts and resources of several universities together to examine the experiences of men and women students in engineering. We were interested to find if there were qualitative difference between what men and women exper-

enced as they progressed through school.

Second, my current operating base places me squarely within a business environment. As an industrial consulting psychologist, I work with human problems and factors in the work environment. This vantage point has given me further perspectives on women in traditionally male fields and the issues they face as candidates for jobs and as new hires.

In college. Sex, yes, does make a difference. Engineering students in our joint study felt the differences place women at an advantage. They sensed that jobs are easier to come by; that women are seen as a "desirable commodity;" and that female students are treated as special.

She's unique; she stands out in the group: she's noticed; she's watched; she's the only one; she's the lone female engineer; she's alone; she's left alone.

Here are some statements from students:

"You have to be willing to 'take the guff' from a professor who's not used to women."

"As a woman, you are an exception, so you try a little harder."

"Since female students are so few, they must want to be here--really motivated."

"Guys expect you to be really smart in the class, and that helps you work harder."

Sex does not make much of a difference in terms of why students choose engineering as a career. Men and women both talk about their interests and abilities being congruent with those of engineers.

However, men students do seem to care more about financial rewards, and women derive some satisfaction from competing and proving themselves.

Sex does make a difference, however, in terms of what keeps students from dropping out. Some men students, but three-fourths of all women students, point to encouragement and support from others a reason for persisting.

Finally, men and women students agree emphatically that women students, in particular, must contend with barriers to their persisting in engineering. These barriers, as the students described them, are both internal and external. External barriers would include such things as being actively discouraged or facing undue social pressure. The following statements depict such external barriers:

"Not being taken seriously as women."

# engineering careers?" asks a researcher

"The flak of people saying, 'We know how you get your grades...'"

"There's pressure for girls to be better than average."

Beyond external obstacles to a woman's succeeding in engineering are internal obstacles to her success. She may doubt her choice, lack some background in shop or electronics, or have difficulty fielding put-downs.

On the job. The issues students face carry over into the job.

In the recruiting process, women are still somewhat favored. Companies typically do not operate with a "quota" system, but they do feel some pressure to hire women. That means that it is possible that a company may be interested in a young woman simply because the job slot "should be filled by a woman. Tokenism exists, but not prolifically.

As a new hire, many women say those first few weeks or months on the job are awkward. Part of the awkwardness is a newness that is familiar to anyone adjusting to a new work environment and a new peer group.

But another part of the awkwardness is related to a woman's uniqueness; especially if she is the only technical woman in the work group, or the first woman. The awkwardness is heightened by other people not knowing how to interact with the young woman.

Another point often brought up by professionals and students alike is the pressure they feel from others to prove themselves. "Justify yourself" is the demand. The pressure, real or not, plays into an apprehension almost all new hires share. That apprehension is "What if I didn't learn enough as an undergraduate?" "Will I be a good engineer?" All newly hired college graduates are integrally concerned with competence: for women it intensified.

Women also sometimes encounter blatant sexual harassment, which may be defined as unwanted, unreciprocated sexual advances that are hard to handle between the two persons.

Relating to managers is an important area; a manager assigning responsibilities can help a subordinate plan for the future, and he or she reviews performance.

One young mechanical engineer felt that her peers in the organization accepted her more readily and easily than did her manager. She stated that he not only had some difficulty understanding her and her motivations,

but he also tried to protect her and treat her differently from the way he did his other engineers. He shielded her from traveling and from doing some of the hands-on design tests.

The authors of The New Managerial Woman, Hennig and Jardim, documented the differences between a man's and a woman's definition of a job and a career. Men think of a job as a task to be completed that has a definite beginning and an end, and a career as a series of jobs that leads one along a path toward gaining recognition and reward.

In contrast, women tend to think of the job as a means of survival or as a means of earning a living, and a career as a means of personal growth and self-fulfillment.

Conceptualizing jobs and careers differently, men and women tend to think differently about the future. Women hope to prove their competence and be rewarded for it. Men tend to think and plan strategically for the future. Current opportunities and responsibilities are seen as stepping stones to their career growth.

## How Hot Is It in Metric?

# National Metric Week

May 10-16, 1981

Use the following chart and poem to answer the questions written below.

To figure what kind of day it will be (metrically speaking), remember the following poem:

**Thirty is hot  
Twenty is nice  
Ten is cool  
Zero is ice**

Try the following questions:

At thirty-five degree Celsius, what would you wear outside?

If you visited a friend in Nome, Alaska, in December, what might the temperature be at midnight?

What is the temperature at noon during your favorite season of the year?

What is the temperature at noon during the season of the year you like least?

For more information write:  
Education Department  
U.S. Metric Board  
1600 Wilson Boulevard  
Arlington, Virginia 22209

## What to expect when you retire

Each year, approximately 100,000 employees retire from federal service. Getting them on the retired roles, and then insuring that monthly checks go out on a continuing basis is a prime responsibility of the U.S. Office of Personnel Management (OPM). Since there are over 1.2 million retirees and 300,000 annuitants, it's obviously a big job. And, without question, to retirees an important one.

If you're thinking about retirement, a review of the process should be of interest. It will give you an idea of what to expect, and some hints on ways you can help make the system work.

Once an employee retires, it takes about a month for the employing agency to close out all records and send them to OPM in order to get the annuity process rolling.

OPM assigns an identifying CSA number to each case upon receipt of records, and informs the annuitant.

So that new retirees are paid as soon as possible, OPM usually places them in a special pay status usually about 10 workdays after receiving records and it is clear that an annuity is in order.

If for some reason it takes partial payment longer than from four to six weeks to begin and a personal hardship exists, contact OPM. If no hardship is involved, however, it's a good idea to wait a little while longer before querying OPM.

Under normal circumstances, partial payments last from two to three months until the final rate of pay is established.

In an effort to avoid some of the delays OPM suggests the following:

- \* File an Application for Retirement, SF-2801, at least two weeks before the planned retirement date giving the agency a better lead time.
- \* Review your Official Personnel Folder at least a year ahead of time to make sure it is complete and all is in order.
- \* If military service is involved, make sure to include a copy of your DD-214 Military Discharge Certificate along with your retirement application.
- \* Make sure that post-retirement life and health insurance and survivors benefits are protected by completing the necessary papers

before you leave.

After the processing period ends, retirees are sent an Annuity Statement which explains regular monthly payments and when to expect them.

If a check is not received within a few days after it is due, a retiree should first contact the local Post Office to see if it has been misdelivered.

Incidentally, by far the biggest reason for non-delivery of retirement checks is failure on the part of the annuitant to notify the Post Office of a change in address.

### "Hot" Lines Can Kill

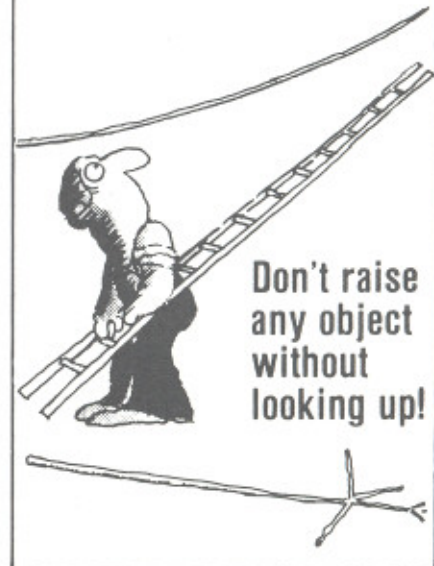
If you received a new television or CB antenna for Christmas, the words to remember when installing either one are, "Look up!"

Don't touch any type of wire with your ladder or the antenna when putting it up on your house.

Electric power lines criss-cross most neighborhoods, and accidental contact with one could lead to disaster.

Even a tree limb used to get a kite out of a tree could contain enough moisture to conduct electricity.

If you treat every wire as "hot" and dangerous, you'll be enjoying the pleasures of your television set for many years to come.



# The one legged wonder

by Bill Shaw

From the "Black Collegian," February/March 1981.

The following article was submitted by Richard Laddusire, EP-E. He is a member of the St. Paul District Handicap Committee.

Frank Yanossy, the high school football coach in tiny Madison, Fla., thoughtfully sends a stream of tobacco juice into the Pepsi cup he carries everywhere.

"You just watch old number 83, the defensive guard," says Coach Yanossy, switching on a wheezing, rattling movie projector.

A football game is projected on the wall. The Brooks County, Georgia Trojans are playing the Madison Cougars, the coach's team.

On the first play, the Trojan quarterback hands to the fullback who sweeps right and is dumped by old number 83. A nice play but nothing special.

In the next series, 83 swivels and darts, throws off two bone-jarring blocks, dives into the enemy backfield and dumps the quarterback. A real nice play.

Number 83 does it again. He bounces off blockers with the grace of a ballet star, moves laterally turns on the speed and runs down the ball carrier from behind. A great play.

"You can't hardly tell, can ya?" the coach asks with a huge grin.

And you really can't. Old number 83, whose name is Carl Joseph, moves with such speed and amazing balance that you don't notice something very important is missing.

A leg. The whole thing.

He has only one. The right one. He plays with no crutches. No artificial leg. No stump. Just one massive leg and he plays better than most kids with two legs.

Carl used that single leg to earn 13 athletic letters in football, basketball and track at Madison High School before graduating last June. He earned them by competing against kids with two legs.

He does all this by hopping. Sort of. Only it doesn't look like hopping. It looks like real running because he does it so smoothly and effortlessly.

He could outrun most of the defensive line in wind sprints. He blocked punts and sacked quarterbacks. He could stuff a basketball and out jump most of the team. He high-jumped 5 feet, 10 inches, which was

higher than anybody on the track team and he threw the shot. He can also bench press 270 pounds.

All on one leg. Honest.

Carl does everything so well that University of Pittsburg football coach Jackie Sherrill gave him a full four year scholarship. He won't be playing football for the Pitt Panthers because the NCAA won't allow players with missing limbs.

But, as any coach knows, motivation in sports is the key to success and Sherrill just wants Carl around to motivate his two-legged players. Carl will work as a team trainer and study biology. His goal is to become a trainer for a pro team. He'll do it.

Carl is six feet tall and weighs 180 pounds. A gentle giant, quiet and unassuming, a young man of great poise and dignity who is trying to figure out what's happening in his life.

Carl was born with one leg and neither his mother nor his doctor know exactly why. To Carl, it never mattered.

"It's all in the mind," he said. "My mind always told me I could do things so I just went out and did them. Never thought much about it. I never worried that I couldn't do something. I just did it. You just keep trying and you always get there."

**GUARD  
YOUR  
CREDIT  
CARDS.**



## Interest in softball grows

by Stanley Sweatsock

The 1981 softball season is upon us and interest and participation in the district office continues to grow. From only one team in 1977, interest has increased to the participation of four Corps teams in the Capitol Hills Softball League.

The league consists of teams from public agencies, mostly from the state level. The four Corps teams, to the best of my knowledge, are the only federal teams in the 30-team league.

The 10-game season opens on May 18 with the games being played at various fields in St. Paul, Minn. If you are interested in joining a team or in going out to see your co-workers play, contact one of the managers of this year's teams:

Corps I Gary Palesh at 725-5935  
Corps II Mary Muraski at 725-7579  
Corps III Sheldon Edd at 725-3700  
Corps IV Tom Montgomery at 725-7593  
(The numbering of the teams has nothing to do with their ability; it is merely the order in which the teams were formed.)

Scores, standings and other happenings will be reported in future issues of the Crosscurrents. Each month, I will include a bit of sports trivia for you avid fans. For this month, can you remember who said:

- "It's not over until it's over."
- "Basaball has been bery bery good to me."
- "Pour the Budwieser to them."

## Annual fishing trip planned

by Tom Heyerman, ED-D

The 8th annual Mille Lacs launch fishing trip will be held on June 12. Anyone interested in participating can contact me at 725-7625.

There are 25 spaces available on a first-serve basis.

A walleye was reported caught and released in April by crappie fishermen, thereby disproving any rumors of a "Dead Sea."

**ARMED  
FORCES  
DAY 1981**



**STRONG  
& READY**

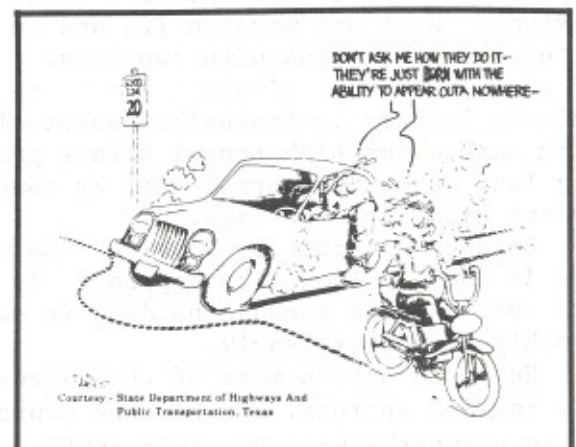
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# Summer picnic 1981

Use your athletic abilities and join with members of your office branches and sections to form teams for this year's picnic. Use attached form and submit early. Limit of 50 teams.

We on the committee have spent a considerable amount of our time coming up with new ideas this year and it has resulted in the following games:

- Tug of war! (Design Branch not eligible to compete)
- Volleyball! (75% of players under 4-foot tall)
- Horseshoes! (No pony hoofs allowed)

But be consoled; we are keeping the traditional games:

- Beverage consuming
- Chicken feed (Meatballs have been added)
- Bird watching (Formerly chick scoping)

This year's agenda for parents and their kids:

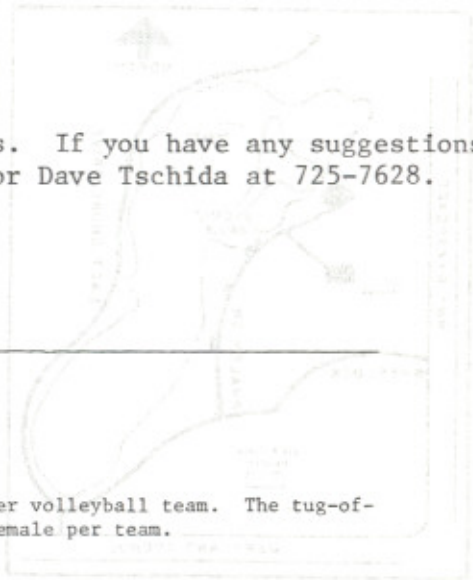
- 12:30 Worm catching
- 1:00, 1:10, 1:20, 1:30...Diaper changing
- 4:00 Swan diving

- Plus: Kickball for kids
- Tug-of-war

Prizes for the kids!  
Pride or humiliation for the adults!

P.S.: We are looking for more fun games involving the kids. If you have any suggestions, please contact someone or: John Kliethermes at 725-7638, or Dave Tschida at 725-7628.

Yes, the softball fields will be reserved.



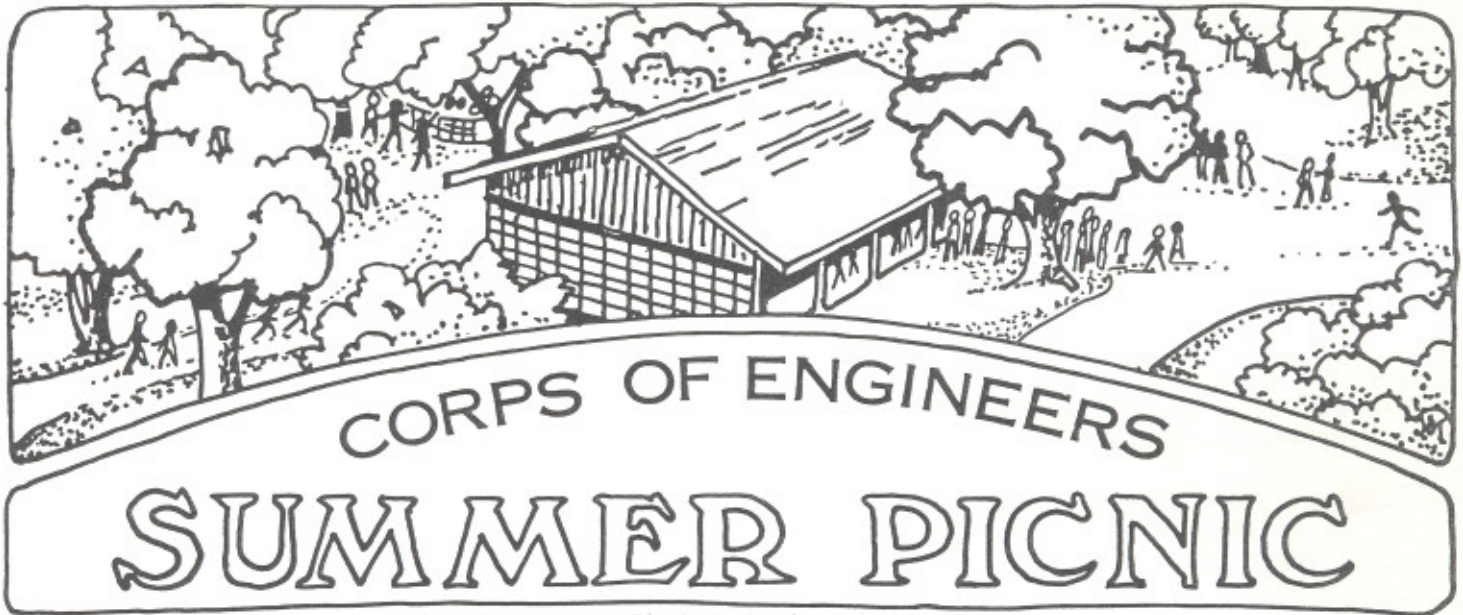
## Picnic volleyball and tug-of-war teams

Please complete and send the form no later than May 22 to:  
John Kliethermes, ED-D, or Dave Tschida, ED-D.

A minimum of six members (male and/or female) are required per volleyball team. The tug-of-war teams will consist of eight members, with at least one female per team.

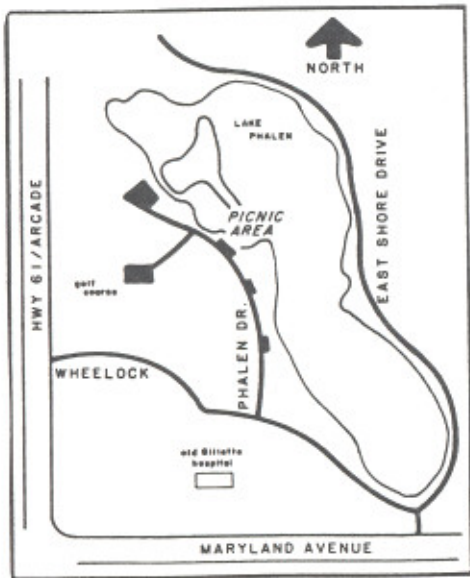
Volleyball Team name _____	Tug-of-war Team name _____
1. _____	1. _____
2. _____	2. _____
3. _____	3. _____
4. _____	4. _____
5. _____	5. _____
6. _____	6. _____
	7. _____
	8. _____

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



PLACE: Lake Phalen Park, St. Paul

DATE: Friday, 19 June 1981 - 12 NOON



PICNIC MENU

- Deep Fried Chicken
- Swedish Meatballs
- Baked Beans
- Whipped Potatoes and Gravy
- Jello - Cole Slaw - Potato Salad
- Italian Salad
- Cake or Brownie
- Coffee or Punch
- Food Service begins at 2 p.m.
- Served Buffet Style, Adults. . . . . \$4.00
- Children Under 12. . . . . 2.50
- Glass of Beer/Can of Pop . . . . . .25

Tickets Go On Sale Beginning  
26 May 1981\*

Be Sure to Get Yours!!!

Games start at Noon, and the Awards Ceremony is at 1:30 p.m.

For More Information Contact: Paul Madison...Ext 7591 or Greg Eggers... Ext 7588

\*An announcement of ticket availability will be made on 26 May 1981. Last date available - 18 June 1981 BEFORE NOON!!!