



# CROSSCURRENTS

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

Vol. 2, No. 6

February-March, 1979

## NEW DISTRICT ENGINEER NAMED

The new St. Paul District Engineer will be Colonel William W. Badger, who is currently assigned to the Office, Chief of Engineers, in Washington, D.C., as special assistant for foreign programs.

In June, Colonel Gay, who has served as St. Paul District Engineer for three years, will be assigned in the Washington, D.C., area.

Presently, COL Badger is responsible for overseeing the Corps' expanded participation in water resources development and construction in foreign countries. He had also been assigned to OCE in 1967 to 1969 as assistant executive to the Chief of Engineers. Prior to this COL Badger was commander of the 52nd Engineer Battalion at Ft. Carson, Colorado.

From 1973 to 1975, COL Badger was deputy engineer and chief of planning and liaison for the engineer district covering Saudi Arabia. During that period he was also the project officer for the Jidda flood emergency operation, which ultimately replaced major pipelines supplying water to the city of Jidda, a city of about one-half million people.

The colonel's involvement with the Corps program in Saudi Arabia began in 1972 as the engineer advisor for the Saudi Arabian Army. He then served as area engineer in Tabuk, where the Corps constructed a complete military installation and community for the Saudi Arabian Army.

Other overseas assignments have included engineer advisor to the island

*(continued on page 2)*



Colonel Gay accepts the bronze plaque award of the National Society of Professional Engineers. This award is presented annually to the government organization which has been most "outstanding in the development and application of forward-looking engineering employment practices." It was presented in Oklahoma City on 26 January by national president Robert L. Nichols...

*And again...*

*(turn to page 3)*

A joint dinner meeting of the Society of American Military Engineers and the American Society of Civil Engineers is scheduled 14 March at the Fort Snelling Employee's Club.

Professor Larry Goodman will give a presentation on the new underground civil engineering building at the University of Minnesota, discussing changes that have occurred in University life and how it affects civil engineering. He will also review the steps the department is taking to meet the pressures placed upon it by increasing enrollment and limited staff. He will have slides of the new Civil and Mineral Engineering Building to accompany his talk.

### Four Kinds of Bones

Someone has noted that there are four kinds of "BONES" in every organization:

- **WISHBONES**, who spend their time wishing someone else would do the work;
- **JAWBONES**, who do all the talking, but very little else;
- **KNUCKLEBONES**, who knock everything anyone ever tries to do;
- **BACKBONES**, who get under the load and do the work!

*(Continued from page 1)*

of Quemoy, Taiwan; operations officer for the 14th Engineer Battalion, and engineer officer for the 35th Engineer Group, in Vietnam. In Europe, he was a company commander with the 77th Engineer Battalion.

COL Badger, a 1959 graduate of Auburn University, earned a bachelor's degree in mechanical engineering. He received a master's degree in civil engineering, with a specialty in construction, from Oklahoma State University in 1964, and a doctorate in civil engineering from Iowa State University in 1972.

He is also a graduate of the Army War College and the Army Command and General Staff College.

COL Badger is a registered professional engineer in the state of Alabama.

A native of Tampa, Fla., the colonel and his wife, Jane Marie, have four children: David, 15; Mae, 14; Anne, 9; and Jennifer, 3.

## Heritage Toastmasters

*by Annabelle Allen*

Heritage meetings are called to order by the Toastmaster of the week, members are greeted and guests are welcomed and introduced. Then the meeting proceeds with the "Word for the Day." One member, previously assigned, presents the word. It can be any word, long or short, familiar or unfamiliar. The definition or meaning of the word is given along with an example of its use. Each of the other members is expected to use the word correctly during the meeting or a small fine is assessed. This develops vocabulary and ingenuity.

The next item of the day is "Table Topics." The Table Topics chairman for the week comes to the meeting prepared with three or four questions concerning current events of interest. They can be on politics, economics, science, personalities, sports or any other subject. The chairman calls on different members to speak on one subject for from one to two minutes. The answers to these questions vary from the absurd to the sublime. It's not important to know anything about the subject as some of the best answers are two minutes of total ad libbing.

The purpose of both the Word for the Day and Table Topics is to help members learn to "think on their feet" and to "speak off the top of their heads."

Next month's subjects will be the business part of the meeting and parliamentary procedure.

## Water resources book ready

The 1979 editions of the Wisconsin and Minnesota Water Resources Development booklets are now available from the Public Affairs Office.

*Car-pooling is the best way to go to and from work. In the face of the energy crunch, St. Paul District people are urged to attempt to get together on transportation. Why not let Cross-currents carry your request for rides or riders? Call Ext. 7505 to place your "want-ride ad."*

# JUST BETWEEN US . . . .

CONGRATULATIONS ON THE BIRTH of a son to KAREN (DC-PC) and DAVID MILTON. Christopher David Milton, 8 lb. 9 oz., was born 3 February. And on a daughter, Tanya Lynn, born to CHAR (CO-GR) and KEITH HAUGER, 27 February. Tanya weighed in at 7 lbs. 12 oz.

HAPPY RETIREMENT to HAROLD FRENCH, Lockmaster at St. Anthony Falls Lock and Dam, after 24 years. Also to ARVO SORVO (DC-FC) after 30 years' service, and MERLIN HEINEMANN, Lock and Dam Operator at Lock and Dam No. 4, after 26 years.

SYMPATHY is extended to ROGER JUST (ED-HF) on the death of his father; to WES SAMPSON, Lock and Dam No. 9, on the death of his mother; and to MARVIN PEDRETTI, Lock and Dam No. 10, on the death of his mother.

HOSPITALIZED recently were LYLE LARSON, (ED-D); LLOYD TIBOR, Lock and Dam No. 5; DON DALEY, Remer; MARY HUTCHINSON, (CO-A) and ART SCHOLLMEIER (SP-P). Also, DAN ALVORD (ED-HF), with the drill crew, was injured in an auto accident on 12 February and hospitalized at Durand, Wisconsin, but is now back at work.

CONGRATULATIONS ON THE MARRIAGE of ROSALIND DAWSON (CO-GR) on 21 February to Johann W. Koenning, of West Germany, a post-graduate student at the University of Minnesota and employee of Northrup-King Seed Company. They have combined Rosalind's maiden name and his name for their surname, Artison-Koenning.

Our sympathy is with the family of Gery Gibbons, marine oiler on the Dredge Thompson, who died 18 February, in an auto accident. Gery, whose father Vernon, is employed at the Fountain City boatyard, made his home with his parents at Arcadia, Wisconsin.



(from page 1)

... the award is presented at the annual meeting of the Minnesota Society of Professional Engineers in St. Paul on 23 February, by Executive Director of the National Society of Professional Engineers, Brigadier General Donald Weirert, Ret.

Arden Duval, of Locks and Dams section, addressed a group of 40 Coast Guard Auxiliary officers at a regional meeting in Rochester on 28 February, and another group of 30 at St. Anthony Falls on 8 March.

Captain Bill Carter, of Construction Branch, is heading for Enewetak Atoll in the Marshall Islands of the Pacific, as Commander of C Company, 84th Engineering Battalion. He will take part in a three-year project to clean up the atoll and make it habitable for the natives, who were evacuated to neighboring islands when Enewetak became the site of nuclear testing in the 40's and 50's. His wife and son will stay with her family in upstate New York for the one year Bill will be stationed on the atoll. Then he will go to Fort Lewis, Washington.

Congratulations to James E. Greene, Head Lock and Dam Operator at No. 9, who was named the Seneca Volunteer Fire Department's 1978 "Firefighter of the Year" by the Schlitz Brewing Co. of Milwaukee. Jim was one of 200 Wisconsin firefighters honored by Schlitz and the Wisconsin State Firemen's Association.

CROSSCURRENTS is an unofficial publication authorized under the provisions of AR 380-91, 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, 2136 U.S. Post Office and Custom House, St. Paul, Minnesota, 55101. Phone: (612) 726-7505

District Engineer  
Public Affairs Officer  
Editor  
Typist

Colonel Forrest T. Gay, III  
James E. Braatz  
Rosemarie E. Braatz  
Cathy Jo Higgins

OLD FASHIONED COMMON SENSE

An old blacksmith who had operated his shop for 50 years without a noticeable accident (save a hot cinder down his undershirt -- an occasion which turned the air blue) was asked the secret of his success and he said, "I'd tell the newcomers something like this:

"Watch where you walk because you might fall over something. If you pump the bellows too hard, the sparks will fly out of the forge. If you work around horses, let them know you're around. Let them see you; talk to them. Then, when you pick up a foot, pick it up. Don't fool around."

In those days, people had never heard of a safety program, but they did know that some horses kicked, that forges could spit a lot of fire, and that if you didn't watch where you were stepping, you might trip and fall. They also knew that black iron could be just as hot to touch as red iron.

I trust our safety programs continue to improve. I would shudder to think what might happen if we were to go back to the so-called "good old days." But I still insist, somewhere along the line, too many people nowadays seem to expect someone else to do all of their thinking for them.

They demand, and get, clean, orderly work areas, excellent lighting, on-the-job safety indoctrination, safety equipment such as hard hats, safety glasses, safety shoes. They even go to school to learn how to work safely.

All of this is good, and as it should be, but too often accidents of the same type, in the same work areas, occur over and over again. People stumble over things, mash their hands while using perfect tools, run into other people, and generally continue to get hurt and killed, even with all of our modern safety devices and techniques.

Some even convey the impression, by the way they act, that someone other than themselves should tell them how to conduct themselves in a safe manner.

Maybe it's time we used the old smith's technique. First we tell them. Then we show them. Then we say:

"If you get too close to that strange horse's heels, he is liable to kick your head off."

## You auto know better!

*What follows are actual quotes from accident reports submitted to various insurance companies by hapless policyholders.*

Coming home, I drove into the wrong house and collided with a tree I don't have.

The other car collided with mine without giving warning of its intentions.

I thought my window was down, but found it was up when I put my hand through it.

I collided with a stationary truck coming the other way.

The guy was all over the road; I had to swerve a number of times before I hit him.

I pulled away from the side of the road, glanced at my mother-in-law, and headed over the embarkment.

In my attempt to kill a fly, I drove into a telephone pole.

I had been driving for 40 years when I fell asleep at the wheel and had the accident.

To avoid hitting the bumper of the car in front, I struck the pedestrian.

My car was legally parked as it backed into the other vehicle.

An invisible car came out of nowhere, struck my vehicle and vanished.

I told the police that I was not injured, but on removing my hat, I found that I had a fractured skull.

I was sure the old fellow would never make it to the other side of the road when I struck him.

The pedestrian had no idea which direction to run, so I ran over him.

The indirect cause of this accident was a little guy in a small car with a big mouth.

### *Martinis with gin, please!*

This notice was reportedly seen on a firm's bulletin board in Modesto, California:

#### Notice To All Employees

It has come to the attention of management that more and more martinis are being consumed at lunchtime. It has also come to the attention of management that vodka is being ordered because of less alcoholic odor.

From this date forward, it will be a firm rule of this company that gin must be used in martinis. We would rather have our afternoon customers know that our employees are drunk than to have them think they are just stupid.

*from Detroit District "Soundings"*

# "Par For The Corps"

The District's information line was busy early last month with inquiries from residents of the St. Croix River valley wondering what "those Army helicopters are doing, spraying something over the river." The strange maneuvers, combined with suspicions as to the possibly poisonous nature of the spray, had St. Croix residents alarmed, and they expected the Corps of Engineers (naturally) to do something about it.

A bit of sleuthing led to the Army Reserve and National Guard Armories and thence to an Army Reserve Flight Facility and thence to an Army Aviation Test Flight Activity... from whence came a full explanation. It was an experiment in de-icing systems on helicopters.

The big helicopter was spraying ordinary water, dyed orange for higher visibility, into the frigid winter air where it would form a frosty cloud... into which the smaller helicopter flew and would ice up. Observations could then be made of the effectiveness of various types of de-icing methods and equipment on the aircraft.

Colonel Alan Todd, chief of the test flight activity, explains that the tests were conducted over a barren region of Wisconsin, east of Grantsburg, and that as the helicopters returned to Holmen Field at St. Paul they simply continued with their experiment as they flew along the St. Croix River. The sprayed water, he said, is completely dissipated in the atmosphere.

The test flight unit, by the way, had to come all the way from Edwards Air Force Base, California, to find ideal icing weather hereabouts.

What goes up doesn't necessarily come down, or so says an elevator repairman recently working in the Post Office building. A chance encounter with the repairman, who was checking out some slight switching problem, led to a brief tour of the 16th floor mechanism which operates the six elevators.. enormous motors, giant coils of cables, electronic switches and safeguard devices to control the speed of the elevators.

Explaining that the steel cables were designed to hold more weight than

the load limits set for each elevator, the fellow was assuring that there was little danger of a cable snapping... and that should such an event ever occur, the car would not fall (as some people have been heard to worry as more and more folks packed themselves into a car). In fact, he announced comfortably, because the counterweights on each car are heavier than any loaded car would weigh, should the elevator cable be broken, the car would "fall" up to be stopped against the reinforced ceiling of the 16th floor.

Whoever said that lightning never strikes twice should talk to any of four DO people -- Lieutenant Colonel Walt Heme, Ed Roscoe, Roger Fást or Jim Kursu -- who were flying back from Chicago during the 22 February storm. The flight had been delayed one hour in Chicago, and the time was now nearly 8 p.m. As rain, sleet, ice, wind, snow and lightning in various combinations played tricks on the ground and in the sky, the DC-10 began its descent for the Minneapolis-St. Paul airport. Suddenly there was a colossal flash of light and blast of thunder; the plane fairly shuddered, and then a stunned silence. Next, the jet veered up under full throttle, and after an interval, the pilot came on the intercom to explain that the plane had been struck by lightning, which bounced off its thin skin. He said that he had pulled up from the landing to enter a holding pattern while the runway was being sanded. He had been informed that the previous aircraft had trouble braking on the icy surface... and this one, fully loaded with 363 passengers, would need even more braking power. The pilot then remarked that the lightning strike was a rare experience, that it would probably never happen again to any of them. But no sooner said than lightning struck again, bouncing off the jet. At last two more strikes followed, completely demolishing the old adage.

The plane continued circling while the storm raged all around. Finally, 45 minutes later, the DC-10 made a smooth landing at Twin Cities International, although it used nearly every foot of runway. Then, for the four travelers, it was only a matter of driving cautiously home on ice-slicked highways.

Jo Banz, who retired in January from the Records Management Office and from the snow and cold of Minnesota, sent a clipping from the Imperial Valley Press last month. Photos show snow in the sand dunes for the first time in 20 years, snow halting traffic in the mountains of Ocotillo. "Snow! Snow! Everywhere but NOT in Brawley. It wouldn't dare. Greetings to all," says Jo. Her address is 309 Russell Road, Brawley, California 92227.



*Archie*  
 "I never would have urged you to take early retirement had I known you'd be hanging around the house all day"

*from SAD, Atlanta, GA  
 Information Bulletin*

Retiree R.C. "Ike" Kolb, at Palisade, Minnesota, sends a clip of an item originally published in the Duluth News Tribune, an item he says he thought we'd be interested in since it refers to early days in the Aitkin-Sandy Lake area.

"Nearly a namesake, William Alexander Aitken always spelled his name with an "E," but it was geographers or map makers who mixed it up to Aitkin, and so named the county and city after the one-time fur trader and explorer of northern Minnesota.

"Aitken was in charge of a John Jacob Astor trading post on Sandy Lake, in his namesake county. He was born in Scotland and came to the U.S. as a boy.

"When his namesake county was born, the Minnesota legislature named it Aiken and had to pass another law to make it Aitkin. They never did get it correct."

Our sympathy is extended to the family of Harry Setterberg, who died on 6 February after a long illness. Mr Setterberg retired in July 1970 from Planning Branch, after which he and Mrs. Setterberg made their home at 195 Tierra Rejada Road, Space 200, Simi Valley, California 93065.

## Can you read this?

Each box below contains a word or group of words. Can you read their meaning in one minute or less? Give it a try—answers are on page 8.

1 SAND	2 MAN BOARD
3 STAND I	4 /R/E/A/D/
5 WEAR LONG	6 IIII OOOO

THE DEVELOPMENT OF a new product is a three step process: first, an American firm announces an invention; second, the Russians claim they made the same discovery twenty years ago; third, the Japanese start exporting it.

COPIERS - All employees are reminded that use of office copiers are for official government business only. Personal business copies can be made on the commercial copier in the lobby or elsewhere.

Harold Taggatz has been reassigned as Chief of Construction Branch, the position formerly held by Jim Ruyak, who has moved to Remer, Minnesota, to serve as Park Manager at the Mississippi River Headwaters. Milt Roppe, who had been at Remer, is now Park Manager of the Mississippi River area, headquartered at LaCrescent, Minnesota.

In Harold Taggatz's place as Chief of Project Operations, is Dennis Cin, formerly Chief of Mississippi River maintenance.

# from personnel office

The Office of Personnel Management has issued a new merit promotion policy giving Federal agencies broad flexibility to develop and negotiate their own promotion programs.

Office of Personnel Management (OPM) director, Alan Campbell, said: "This action is a vital step in our efforts to give Federal agencies more authority and responsibility to better manage their personnel programs."

The revision gives effect to a key feature of the Civil Service Reform Act ensuring management's right to promote from within an agency or select from outside sources.

The new policy eliminates extensive and detailed regulations in favor of five broad provisions requiring that:

- (1) promotion be based on merit;
- (2) evaluation methods used are valid and job related;
- (3) the search for candidates must be wide enough to ensure high quality competitors;
- (4) management retains its right to select from any appropriate source; and
- (5) agencies must keep records and provide necessary information to employees and the public.

Campbell told agency heads that the new guidelines should open the way for more innovative, effective approaches to promotion programs, and solve some of the problems experienced in the past.

Until now, agencies have had to operate their promotion programs under more specifically detailed instructions.

The new policy, based on recommendations of the President's Personnel Management task force, was issued after a period of public comment.

## MENTAL RETARDATION MONTH March 1979

- Read the brochure "So You're Going To Hire A Mentally Retarded Person", available from Committee members.

- Watch for the Committee-sponsored program on mental retardation during the month.

# Incentive Awards

## Quality Step Increase

Gerry D. Enger, ED-D

## Outstanding Performance Rating

Denise G. Blackwell, CO-GR  
Charleen M. Hauger, CO-GR  
Lyle J. Nicklay, AS-P  
Gary D. Palesh, ED-ER  
Michael M. Weburg, CO-GR

## Outstanding Performance Rating and Quality Step Increase

Albert M. Bjorkquist, ED-PB  
Martin R. McCleery, ED-PB  
Catherine A. Smith, DC-F

## Special Act Award

Mary A. Marx, CO-GR

Ms. Marx, as a GS-4 Student Trainee handled a significant part of the workload of a GS-8 Applications Review Specialist who was on extended sick leave, during the period 11 October to 20 November 1978.

Constance T. Bonasera; Lexine C. Jordan; Donna M. Knittel and Arthur E. Schollmeier, SP-P

During the period 1 October 1975 to 30 September 1978 Ms. Jordan, Ms. Bonasera, Ms. Knittel and Mr. Schollmeier placed and processed a number of procurement actions covering work of the highest priority-orders requiring obligations prior to established deadlines. These actions, as well as less pressing ones, were completed and funds were obligated in an expeditious manner, despite a sharply increasing workload of 17.7% over the 3 year period.

## Sustained Superior Performance

George J. Richtman, CO-M, Mississippi River Section

## Suggestion Award

Roland T. Murray, CO-LS, Maintenance & Survey Section

A GOOD SUPERVISOR, they say, is someone who can step on your toes without messing up your shine.

# No Cross Words or Puzzles When You Buy Savings Bonds



6. Japanese sash.
7. Not any.
8. Bonus.
9. Coaster for winter.
14. Measure of weight.
16. Owning Savings Bonds will provide you with this.
17. Journey.
18. "My \_\_\_\_\_Tis of Thee."
21. Symbol for tin.
24. Prefix meaning not.
26. Golfer's need.
29. Little chance of winning; great risk. (Abbr.)
30. What you take in America when you buy Savings Bonds.
32. Another word for us.
35. One thing a secretary does.
37. Female deer.
39. Doing business at. (Abbr.)
41. Distress signal.
43. Southern state. (Abbr.)
46. Preposition meaning Like.

## Across

1. Your best investment.
10. Females.
11. Indefinite article.
12. Do this to an egg if you want it soft.
13. You'll have this kind of an egg if you buy Savings Bonds.
15. Outlay of money for income or profit. (What you do when you buy Savings Bonds.)
19. Selected course of travel (Abbr.)
20. These come before Jrs.
22. Duck known for its down.
23. French for Yes.
25. Small insect.
27. 101. (Roman numerals.)
28. America's favorite relative.
31. Female sheep.
33. The corners of your mouth go this way when you buy Savings Bonds.
34. Aide. (Abbr.)
35. Age between 12 and 20.

36. Score in football. (Abbr.)
38. Best day to buy Savings Bonds.
40. Raised platform.
42. Last half of your allotment plan for buying Savings Bonds.
44. Smokey's intercom.
45. First half of your allotment plan for buying Savings Bonds.
47. Preposition meaning in the direction of.
48. Affirmative vote.
49. You use these on ice.
50. These open doors.

## Down

1. Savings Bonds can help finance his education — male heir.
2. Best country in the world.
3. Men's sleeveless garment.
4. Savings Bonds accrue this after two months.
5. Jokes.

Solution to Puzzle



## Can you read this?

The answers to the puzzles on page 6 are as follows:

1. Sandbox
2. Man overboard
3. I Understand
4. Read between the lines
5. Long underwear
6. Circles under your eyes

An Al-Anon Family group meets on Thursday at noon in Rm. 912 of the American Center Building which is next door and west of the Post Office.

Al-Anon is an anonymous group for relatives and friends of active or recovering alcoholics.

For specific questions, call 222-3211.



# WORK IS FOR EVERYONE

by Charles Walton

*Handicapped.* Now that's a loaded word, bringing to mind myths and stereotypes about handicaps and handicapped persons few of us take the time to challenge.

How do you react when you meet a handicapped person - say, someone in a wheelchair or a person with a history of emotional or mental illness? Spend a few minutes answering these questions:

- How do you feel? How do these feelings affect your interaction?
- Do you see the handicap before you see the person?
- Do you assume that one handicap implies another? For example, do you speak loudly (or softly) to a blind person with normal hearing?
- Do you refer to "the blind", "the disabled", "the retarded", or "the handicapped" without realizing that these adjectives refer to persons?

If you answer yes to one or more of these questions, don't worry - you're o.k. Becoming aware of how you react is the first step toward change. Stereotypes are destructive when they keep others from realizing their potentials and from achieving human dignity. Most of us get our sense of worth by the work we do. Handicapped persons are no exceptions.

Handicapped men and women comprise a large, untapped labor resource in the U.S. The Federal government has taken the lead in implementing the requirements of the Rehabilitation Act of 1973 and the Vietnam Era Veterans Readjustment Act of 1974 in promoting their hiring. We can be proud of that. Closer to home, employees of the Corps of Engineers should be proud that the St. Paul District has a strong affirmative action plan to bring handicapped employees on board. The District now has 84 workers with handicaps ranging from physical disabilities to the "hidden handicaps" of epilepsy, cancer, heart disease, and mental/emotional problems. As a part of its EEO Program, the District has set up a Hire the Handicapped Committee with the following members:

Rich Laddusire	EP-E (7514)
Phil Campbell	EP-E (7514)
Charles Foye	EP-S (7500)
Sharon Brown	EEO (5838)
Ron Wolney	DC-B (7520)
Peggy Peterson	ED (7567)
Charles Walton	CO-A (7552)

This committee will promote the hiring of handicapped persons and the education of supervisors and all employees to the awareness that disability does not equal lack of ability. It will do this through monthly programs, articles in the CROSSCURRENTS, and by personal contact.

What can you do? You can change how you relate to handicapped persons by :

- Being honest with your feelings and by sharing them with the person, if possible.
- Seeing past the handicap to the person.
- Evaluating ability, not just disability.
- Keeping an open mind.
- Dedicating yourself to promoting hiring of handicapped workers.
- Sharing your concerns and ideas with members of the Hire the Handicapped Committee.

# CORPS NEW ROLE WITH EPA

by Bruce Ragan

Chief, Treatment Works Section

The Corps of Engineers involvement in carrying out the objectives of the Nation's Clean Water Act through the EPA Construction Grants Program is in assisting EPA, states and grantees in contract administration and construction of sewage treatment works, and in assuring that these projects are built in accordance with high engineering and construction standards and within applicable Federal requirements.

In short, the Corps has taken on the role of consultant for EPA in the construction of sewage treatment facilities. The multi-billion dollar Construction Grants Program is one of the largest Federal government programs in effect today. At present, nearly 4,000 sewage treatment plants are under construction. So far more than \$19 billion has been spent to help cities build sewage treatment systems and approximately another \$25-billion has been authorized through fiscal year 1982.

*"... a key means of cleaning up water pollution in the nation's rivers and streams."*

The multi-billion dollar construction program is conducted under the Federal Water Pollution Control Act of 1972 as a key means of cleaning up water pollution in the nation's rivers and streams. The 1972 law, as amended in 1977, calls for a level of water quality to support fish and recreational use in America by 1984. The 92-500 Public Law of '72 brought the Federal share to 75 percent of costs; it also called for a strong enforcement program which would encompass the State-wide planning process, facilities planning and discharge permits.

Section 201 of the Act addresses the actual Construction Grants Program. A three-step grant process is generally required in order for a community of one or more political jurisdictions to obtain Construction Grant Funds. Note that these funds are only available for publicly-owned facilities.

Before the program can be initiated, the states must establish a project priority list based on severity of pollution problems, population affected and

other factors. Once this list is established, the actual Grant Program can begin for a particular municipality or sanitary district. The State allocation of construction grant funds is based on this priority list.

If a state is not able to commit all allocated funds for any given fiscal year, those funds are available for other states to claim. Although this hasn't happened yet, it is clear that some political repercussions might result if a state loses millions of dollars of Federal money.

A Step 1 grant is made for the development of a facility plan which will include the treatment plant location, size, type of process, method of effluent and sludge disposal, interceptor sewer routings and other steps necessary for construction of the project. A Step 2 grant is then made for development of the actual plans and specifications. A Step 3 grant can then be made, after approval of the Step 2 grant, for actual construction of the project.

The 1977 Clean Water Act provided many additions and amendments to Public Law 92-500 to reflect institutional changes and public concerns. Two of these additions which directly affect the Corps of Engineers were 1) states were given more authority to establish water quality standards. This authority is given in Section 404(T) (known as the Anderson Amendment) and directly affects the Corps dredging operations. The second of these which directly affected the Corps was the requirement that Federal facilities must now meet water quality standards.

*"...the current budget of about \$5-billion a year."*

Another important added provision was allowing innovative and alternative technology in wastewater treatment. This meant that previously untried and unproven treatment processes could be used in some cases.

As Federal participation in construction of treatment facilities grew rapidly after 1972 to the current budget of about \$5-billion a year (which we may compare with the Corps Civil Works Budget of \$1.8

billion) the need for changes became obvious. It became clear that additional personnel to manage and administer the program was necessary to effectively carry out the program, avoiding contract delays and conducting on-site inspections. The communities themselves weren't taking active roles to see that their facilities were constructed in accordance with grant requirements.

Alternative solutions to provide needed

*"... the Corps of Engineers' proven track record."*

personnel for the Construction Grants Program included 1) expanding the Environmental Protection Agency staff; 2) creating a new construction management agency or; 3) utilizing the expertise of existing agencies. This last course was finally chosen.

Because of the Corps of Engineers' proven track record in construction management and because the Corps already had the experienced construction personnel, they could provide valuable assistance for on-site inspections, and general overall construction management. This in turn led to other responsibilities in which the Corps had expertise.

Presently, the St. Paul District is actively involved in the construction of 60 wastewater treatment projects valued at approximately \$450-million. By 1980, we will be responsible for about 300 projects worth \$1.2-billion; and by 1984 the St. Paul District will have been involved in over 800 projects with a present estimated value of over \$2.6-billion.

To handle this workload, a District office was established here in St. Paul, and area offices have been established in Milwaukee and Appleton, Wisconsin; Duluth and South St. Paul, and another office will soon be established in Rochester, Minnesota. These offices will generally be staffed with two engineers or one engineer and a construction representative who will manage the projects in their respective geographical areas and report to the District office.

Eight people including six engineers will staff the District office. Functions performed by this office will include all biddability and constructibility reviews, project management functions for all projects assigned to the district, project tracking, providing ad-

vice and consultation to field offices, performing interim inspections and generally managing the District's efforts in this work.

We plan to have a total of 25 people involved in administering this program in Minnesota and Wisconsin by late this year. These employees will come mainly from the Corps ranks nationwide and be given an initial indoctrination training period with both the EPA and presently trained Corps personnel to insure the objectives of the program are understood.

In addition, personnel are given overview training in sanitary engineering with respect to the design, operation, and construction of wastewater treatment facilities as well as other necessary training.

The facilities with which we are involved range from the advanced wastewater treatment facilities for metropolitan areas like the Twin Cities, Rochester and Milwaukee to small wastewater settling ponds for rural communities of less than 300 people.

In Milwaukee for example, over one billion dollars are planned for the construction program over the next three years. This consists of constructing new plants to incorporate the latest treatment technologies, modifying existing plants to incorporate secondary treatment and installing new pumping stations and sewer systems which will handle future volumes without bypassing to Lake Michigan. Here in St. Paul, we are now actively involved in over \$200-million worth of construction at the Pigs Eye Plant with another \$100-million scheduled to be awarded this year. Besides these very large projects, there are several projects exceeding \$20-million, such as Rochester where about \$50-million worth of construction should start early next year.

*"It becomes very important that we identify any and all problems..."*

The major duties of the St. Paul District are to 1) manage Step 3 grant activities for EPA, including providing advisory services to grantees and their consultants; 2) perform construction oversight activities on Step 3 projects and 3) conduct reviews of project plans and specifications to insure their biddability and constructibility.

*continued on page 12*

# EPA

(continued)

Once a project has been assigned to us for project management, we then become the point of Federal contact for all correspondence concerning the project. Under this phase of the work, all official records are kept by this office. It becomes very important that we identify any and all problems associated with a project and work out a solution to those problems with the grantee and the consultant.

The frequency of on-site inspections performed on a project is dependent upon several factors including the size, complexity of construction, environmental sensitivity, and quality and quantity of work being performed. Generally, projects

*"The overall goal is to avoid contract modifications and change orders, both of which can be very costly..."*

having a value in excess of \$50-million will require full-time inspection. On-site inspections will usually entail a check of the project accounting and construction records, inspection of the construction, analysis of the project schedule, a check for compliance with the NPDES permit, and the progress of operator training. Inspections will not include the "Performance of Construction" tasks (e.g., concrete slump tests, soil density checks, etc.), but will ensure that an adequate system for accomplishing these steps is in effect.

Briefly, our biddability and constructibility review unit is responsible for reviewing the final plans and specifications for proposed projects in order to 1) ensure that the bid documents are simple, clear and include all the necessary items to allow contractors to understand and respond competitively; 2) ensure that the plans describe the project adequately for construction purposes and 3) ensure compatibility between the plans and specifications.

To accomplish these review goals, specifications are scrutinized for statements and conflict that require contractors to place contingencies in their bids. They are also checked for compliance with the Code of Federal Regulations and other applicable laws, ordinances and regulations. Plans and specifications are also examined for conflicts between crafts and unnecessary expenditures ("goldplate items"). The

overall goal is to avoid contract modifications and change orders, both of which can be very costly to the government. We anticipate performing approximately 100 biddability/constructibility reviews in 1979.

Our involvement with the EPA Construction Grants Program is an example of how the role of the Corps of Engineers is changing. We are no longer primarily concerned with just the design and construction of large dams. Evidence of this can be seen in the huge construction management program being undertaken by the Corps for Saudi Arabia; recent publications indicate the Corps will continue to pursue this endeavor in other countries as well.

Perhaps also the Corps will actively pursue the role of consultant for other Federal agencies as well as EPA in the future. The solution of problems associated with non-point sources of pollution and the disposal of the ever-increasing sludge volumes generated... due to advance treatment of wastes... are just two of the areas in which the Corps could continue to assist EPA in the field of pollution abatement.

In addition to these two areas, new drinking water standards established by EPA will require that new water treatment plants be constructed or that modifications be made to many of the existing facilities; this construction program could also involve the Corps.



Richard Martig (left) and Bruce Ragan discuss the working model of a wastewater treatment facility in the St. Paul office.

## NEW JOB... NEW TRAINING

Digesters, clarifiers, aerators, trickling filters, landfills... these are a few of the terms which are becoming increasingly familiar to Corps people who have been reassigned to the EPA Construction Grants program, which was launched here just last fall.

When the Corps was called upon to take on the role of consultant for EPA in the construction of sewage treatment facilities, there were no precedents to follow. A team of engineers and support people was quickly assembled to staff the central St. Paul office and the various field offices throughout the states of Wisconsin and Minnesota.

Bruce Ragan, a civil engineer in design branch, was tapped to act as chief, or coordinator, of the new section, which, he explains, "combines construction and sanitary engineering."

"The program is so new that even many civil engineers found themselves for the first time applying theory and design they had learned to practical situations," Bruce explains. "We'll be establishing ground rules as we go."

First and foremost, Bruce saw a need to give everybody from civil engineers to office clerks an overview of what sanitary engineering -- or wastewater treatment -- is all about. He wanted the entire team who'd be working together to start with a basic understanding of the subject. "It's a new experience for all of us," he says.

They needed to know of equipment and materials available, by what suppliers, for what specific jobs; of testing methods and operational hang-ups; and the basic operating principles and language associated with sewage collection and treatment.

Bruce worked with new employee-engineer Harry Grounds in starting to set up a course outline, but Harry resigned to return to his own engineer consulting and design firm; His company specializes in producing operating and maintenance manuals for sewage treatment plants.

When Bruce had a broad plan assembled, he contacted Alan Kraft, of the District's Training and Development Office, and briefly explained what he had in mind. "Al was very enthusiastic about the course, and said he'd get right to work



*The District office Treatment Works Section, (left to right) Mary Ann Rheinberger, Richard Martig, Ronald Westerland, Terrie Ciurleo, Dale Johnson, Bruce Ragan and Joel Rogers.*

on it," Bruce recalls. "I wasn't that confident myself that we could get the course going, there were so many elements to work out."

But not long afterward, Bruce heard from Al. "He had made contacts with instructors, contracted them, took care of funding and had the materials lined up."

The week-long training session was taught by Harry Grounds in a Federal Courts Building classroom, attended by some 20 people from the main office and the various EPA field offices as well as civil works and operations personnel.

"It was a concentrated course, offering not only theory but practical, useful information for carrying out the job," Bruce points out. There was analysis for example, of collection systems, pumping systems and treatment systems including packed biological reactors, flexible liners in landfills, lift stations... which were the best types and where to obtain them, what were the comparative advantages and disadvantages.

"One responsibility we have is to be sure that we can communicate with the people who will be running these plants once they're installed. We have to be able to thoroughly understand the system in order to determine if the operator can follow the flow through the plant and know what's happening at each stage, and why it's done

## EPA TRAINING

(continued)

this way.

"If we don't know how a system works, we can't really determine if it's doing the job it's supposed to do, and we can't tell if the operating personnel are adequately trained."

Following the preliminary training course, a second week-long training session was held early in February, concentrating on "Construction Contract Management and Control." This course, also worked out between Bruce Ragan and Al Kraft, emphasized funding, estimating and scheduling procedures, taught by James Ramer, project manager of the Milwaukee field office and a part-time lecturer at the University of Wisconsin-Milwaukee.

An Army Reservist employed by a private engineering firm in Kansas City came to give an intensive session on specifications; and other classes included legal implications, by Tom Larson; safety, by Sam Moore and value engineering, by an

NCD instructor.

Al Kraft says, "The fact that Bruce saw the need for training right at the outset of the program is commendable. This was an ideal situation, a new program, and new employees, off to a good start, before bad work habits and practices developed."



Area office Construction Representatives: Donald Brown, Twin Cities; Arnold Mervin, Appleton, WI; Voltaire Serra, Duluth.

# It's Easy to Be a Successful Failure

By A. Perrault

We hear a great deal about the laws of success, and self-help books are a booming business. But how about our right to fail?

An exhaustive survey taken recently disclosed that only three percent of all Americans are "outstandingly successful," 68 percent are "moderately successful," and 29 percent are "complete failures," achieving nothing.

The failure category is exemplified by two tramps sitting on a park bench discussing the economic situation. One said to the other, "This depression don't bother me none . . . I was a failure during the boom."

Here's how to guarantee failure even during times of unprecedented prosperity:

- Be a drifter—avoid setting goals.  
The *Wall Street Journal*, faced with the complaint that high taxes make it impossible for anyone to rise from rags to riches today, made a study which disclosed there have been

more new millionaires starting from nothing in the past decade than in any other period in history. These people were all different in many ways except that they were decisive.

- Procrastinate—don't put it off, procrastinate

today! If you get a sudden urge to "do it now" just sit down until the mood leaves you.

- Be negative—if you want to be a failure, think failure.

Research conducted by Columbia University disclosed that it is not

aptitudes but attitudes that make us successful: 93 percent of our success is attitude and seven percent is skill and knowledge.

- Be a poor communicator—be a poor listener. Even a fool is considered sensible when he keeps his mouth shut, so yak up a storm and remove all doubt.

- Sell yourself short—remind yourself constantly about all of your weaknesses, shortcomings, and past failures . . . and don't forget to tell others.

- Be a worry wart—worry prevents our doing the very thing that would remove the worry.

- Don't try—if at first you don't succeed, forget it! Everyone is a self-made person, but only the successful admit it.





NEW EMPLOYEES

Christine J. Wallace, EO  
Phone: 5838

Mark Kent, CO-GR  
Phone: 7558

Patricia Westfall, ED-D  
Phone: 7620

Janice C. Soul, DO-P  
Phone: 7959

Thomas J. Singer, ED-D  
Phone: 7626

Neil T. Schwanz, ED-HF  
Phone: 7591

Nancy L. Lomen, AS  
Phone: 5921

David L. Vanlieshout, CO-GR  
Phone: 7977

Gregory W. Eggers, ED-HF  
Phone: 7587

Connie Pearson, CO-GR  
Phone: 7558

Yvonne Larson, CO-GR  
Phone: 7804

Laurie J. Lucking, ED-ER  
Phone: 7632

Gabriel A. Desmare, ED-ER  
Phone: 5934

Thomas E. Raster, ED-PB  
Phone: 7019

NEW OFFICE EXTENSIONS

Dale S. Mazar, ED-D....5917  
Charles A. Spitzack, ED-D....7628  
James W. Kane, ED-D....7636



Jan Pream (CO) had been bowling pretty "hot" recently -- even had a 269 game the week before -- but on Monday, 29 January, she hit a 608 three-game series. As a substitute bowler in the mixed doubles league at Ran Han, in St. Paul, Jan bowled a 212, 215 and a 181. Her team won all four games that night, and the opposing team players said they wouldn't "let her come back." Jan, who bowls regularly on Tuesday and Friday nights, in addition to subing on Monday nights, has had 17 five hundred games this year.

Ten photographers, hired by the Minnesota Geographic Society with a \$74,000 grant from the federal government, spent nine months documenting what life was like in Minneapolis in 1978. They took thousands of pictures. Some 1,200 were finally selected, printed and will become part of the Minnesota Historical Society's record of Minneapolis.

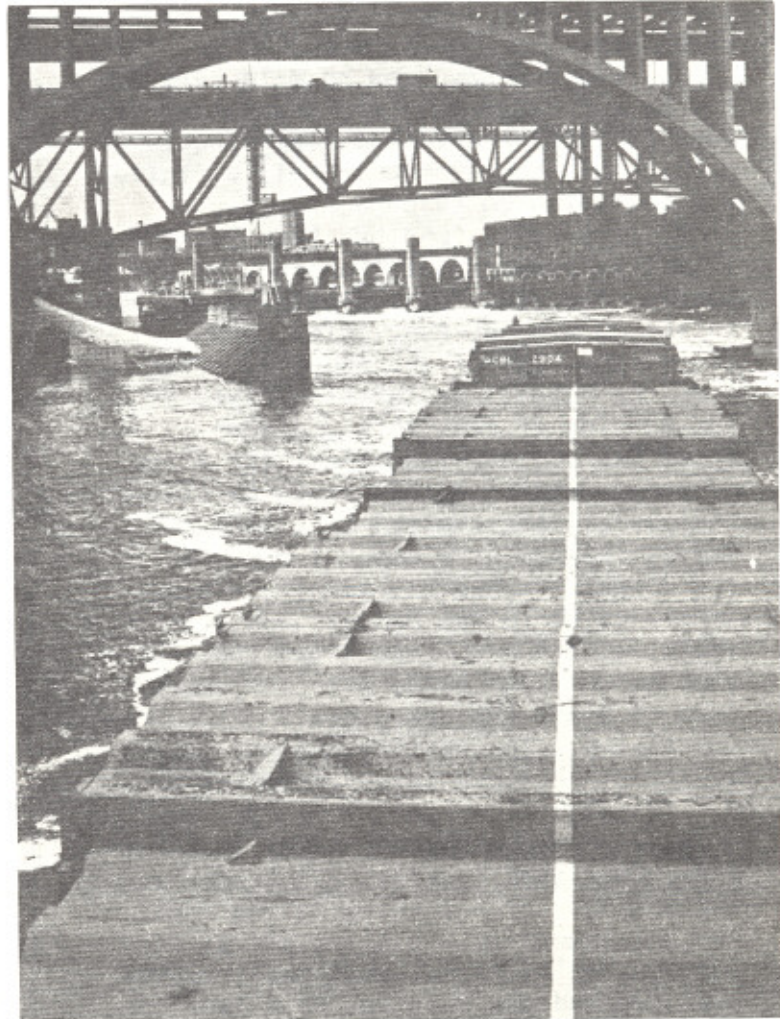


Photo by George Heinrich  
A barge moved through Lower St. Anthony Falls Lock and Dam on the Mississippi River. July, 1978.

from Minneapolis Tribune, 4 Feb 79

NEW  
EMPLOYEES

Two script type elements have been borrowed from public affairs office, but not returned. Please check to see if you have one of these in your office.

# Tragedy Strikes!

## Headwater Notes

(Excerpts from Headwaters ledgers)

Pokegama Falls Dam Minn.  
March 6th., 1889

Major Chas. J. Allen  
Corps of Engr's. U.S.A.  
St. Paul, Minn.

Sir:

Here with enclosed please find gauge reading reports for the 3 dams, for the week ending Sat. March 2nd., 1889; also weather records for the month of February.

During the week ending Mch. 2nd., one sluice was filled with rock at L.L.D., making a total of 27 sluices finished. The supplies that were purchased for the upper dams were sent up from here on March 4th.

The weather has been so mild here for the past 7 days, that the snow has pretty near all disappeared and sleighing is about gone. Lumber men in this vicinity are beginning to suspend operations.

David Cassidy, who has been looking after the property at the dikes on Pokegama Lake, was found frozen to death on the morning of Feb. 28th., about 6 miles below Itasca and about 2½ miles from the dikes. He left the dikes on the morning of Feb. 24th., coming to Grand Rapids, and from the later place up here. While at this place he signed the payroll and started back to Grand Rapids leaving here about 3 p.m. for the dikes. On his way down he stopped at Itasca for a few moments and left there about 4 p.m. that being the last time he was seen alive with the exception of a man that seen him 3 miles below Itasca. The weather was not at all severe temperature being somewhere about 0.

A man named Black who lives near the dikes knew that Cassidy left Sunday morning and him not returning on the 28th., thought something was wrong and started for the Rapids to see what the trouble was. He had not went but 2½ miles from the dikes when he came to the body. It is supposed his feet froze on him having only one pair of stockings on with a pair of moccasins and traveling on snow shoes. He had no matches with him and it is evi-

dent that he done considerable struggling before he died by the way the snow was tramped around where the body lay.

His remains were taken to Minneapolis to be buried being a member of I.O.O.F. I sent a man to the dikes (A.M. Elmslis) to look after things there until I would hear from Mr. Johnson.

The discharge, at Leech Lake Dam was reduced to about 100 cub. ft. per sec.; at Winnibigoshish to 50 cub. ft. per sec. and Pokegama to a trifle less than 300 cub. ft. per sec. on March 1st.

Will go over to the dikes sometime this week and see how everything is there.

Respectfully Your  
Obedient Servant  
Barney Finnigan

### 1979 leave-year holidays

19 February, Monday, Washington's Birthday  
28 May, Monday, Memorial Day  
4 July, Wednesday, Independence Day  
3 September, Monday, Labor Day  
8 October, Monday, Columbus Day  
12 November, Monday, Veteran's Day  
22 November, Thursday, Thanksgiving Day  
25 December, Tuesday, Christmas Day  
1 January 80, Tuesday, New Year's Day

### Waging War On Language

# SEXIST!

In the battle against sexist language, the latest moderator to enter the fray is an educator in the West. Professor Robert Longwell of the University of Northern Colorado has come up with a whole new set of words. "Hesh" (with a long e) would be used for "he or she." Instead of "his or her" the professor recommends the use of "hizer." And for "him or her," another unisex word, "hirm." And in place of "mankind or womankind," substitute "mowankind."

Problems? Nary a one as long as one keeps hizer wits about hirm, or surely hesh will find hirmself at odds with the rest of mowankind.