



US Army Corps
of Engineers
St. Paul District

Crosscurrents

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Co-worker is nominated for young engineer award

by Blanche H. Fong, PA

Capt. James Scott, a civil engineer with the St. Paul District, was recently nominated by the Society of American Military Engineers (SAME) for the Young Engineer of the Year Award.

Scott will be competing among several other nominees from various professional societies, to receive the annual award.

The award is sponsored by the Minnesota Society of Professional Engineers. The winner of the award will be announced at a banquet on Feb. 26 at the Radisson Hotel, St. Paul, Minn.

Each nominee for the award must qualify according to three criteria: (1) the nominee must be an engineer; (2) the nominee must be 35 years old or younger; and (3) the nominee must place in at least one of four categories.

The four categories include (a) technical achievements; (b) civic and community contributions; (c) contributions to a professional society; and (d) other, such as in education.

Scott is presently working on the Lock and Dam 1 Rehabilitation Project and also with the Procurement and Supply Division.

"My most important achievement accomplished in the St. Paul District was the successful completion of stage one on the Lock and Dam 1 project," says Scott.

Scott joined the district in January 1980. His military assignment with the district will end in July 1982.

Scott was formerly the program chairman and is presently the junior vice president of SAME.



Capt. James Scott.

Also inside:

* Winners of the 1981 Corps Design and Environmental Awards on page four.

* Winners of the 1981 district fishing contest on page 14.

Who's getting awards?

by Sharon Brown, EE

A recent evaluation of the numbers of incentive awards given to permanent and permanent part-time employees during Fiscal Year 1981 revealed the following.

Awards included outstanding performance, outstanding with quality step increases, sustained superior performance and special act awards.

The total number of incentive awards during Fiscal Year 1981 were 143; total awards to GS employees were 106 (74.1%); total awards to WG employees were 37 (25.9%); total awards to women were 34 (23.8%); total awards to minorities were 7 (4.9%); and total awards to nonminority males were 102 (71.3%).

For comparison purposes, the following shows the number of employees in permanent or permanent part-time positions during that same period.

The total number of employees were 697; total number of GS employees were 438 (62.8%); total number of WG employees were 259 (37.2%); total number of women (including minority women) were 119 (17.1%); total number of minorities (males and females) were 25 (3.6%); and total number of non-minority males were 559 (80.2%).

Consumer news: cooking

NEVER boil water in an open pan. Water will come to a boil faster and use less energy in a kettle or covered pan.

KEEP range-top burners and reflectors clean. They will reflect the heat better and you will save energy.

MATCH the size of the pan to the heating element. More heat will get to the pan; less will be lost to the surrounding air.

When using the oven, make the most of that heat. Cook as many foods as you can at one time. Prepare dishes that can be stored or frozen for later use or make all oven-cooked meals.

WATCH the clock or use a timer; don't continually open the oven door to check food. Every time you open the door heat escapes and your cooking takes more energy.

USE small electric pans or ovens for small meals rather than the kitchen range or oven. They use less energy.

USE pressure cookers and microwave ovens if you have them. They can save energy by reducing cooking time.

WHEN you have a choice, use the range-top rather than the oven.

The next deadline for all articles to be submitted to Crosscurrents is Feb. 22.

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1981 design and environmental awards announced

Winners of the 1981 U.S. Army Corps of Engineers Design and Environmental Awards competition were announced on Dec. 29 in Washington, D.C.

Twenty-one Corps projects were selected by juries of distinguished professionals in the respective fields.

Recently completed civil works and military construction projects were eligible for entry in four competition categories: architecture, engineering, landscape architecture and environmental.

Entries judged worthy of national recognition received one of three awards: Honor Award, Award of Merit or Honorable Mention. There were 114 Corps projects worldwide entered in the 1981 competition.

The Chief of Engineers Design and Environmental Awards program was begun in 1965 to recognize excellence in design and later was expanded to include environmental achievement related to structures completed or areas developed by the Corps and their consulting firms.

The awards program also serves as the U.S. Army's support to the Federal Design Improvement Program.

ARCHITECTURE

The three jury members were Robert M. Lawrence of the American Institute of Architects, Oklahoma City, Okla.; David McKinley Jr. of McKinley Architects, Seattle, Wash.; and Thomas Hodne of Hodne/Stageberg Partners, Minneapolis, Minn.

The Honor Award was given to the Jumma Mosque, King Faisal Naval Base in Jeddah, Saudi Arabia. The design agency was the Middle East Division and the design firm was Parsons-Basil, a joint venture.

The Award of Merit went to two projects. One to the San Francisco Bay Model Visitors Center in Sausalito, Calif. The design agency was the San Francisco District and the design firm was the Promontory Partnership.

The other project was the Royal Saudi Air Force Headquarters in Riyadh, Saudi Arabia. The design agency was the Middle East Division and the design firm was Smith, Hinchman and Grylls Associates Inc.

The Honorable Mention went to the Bachelor Officers Quarters in Fort Stewart, Ga.

The design agency was the Savannah District and the design firm was Lucas and Stubbs Associates Ltd.

LANDSCAPE ARCHITECTURE

The three jury members were Calvin Bishop of the American Society of Landscape Architects, Houston, Texas; John W. Bright of the National Park Service, Denver, Colo.; and Carol R. Johnson of the Carol R. Johnson and Associates Inc., Cambridge, Mass.

The Honor Award went to the McGillivray Campground in Kootenai National Forest, Mont. The design agency was the Seattle District and the design firm was the National Forest Service.

The Award of Merit went to the McCall Hatchery in McCall, Idaho. The design agency was the Walla Walla District.

The Honorable Mention was given to two projects. One to Lake Sonoma Overlook in Lake Sonoma, Calif. The design agency was the San Francisco District and the design firm was Royston, Hanamoto, Alley and Abey.

The other project was the Emergency Water Pumping Station in Washington, D.C. The design agency was the Baltimore District and design firm was Paul Spreiregen and Black and Veatch.

ENGINEERING

The three jury members were Otto A. Tennant of the National Society of Professional Engineers, Des Moines, Iowa; Dr. James R. Sim of the American Society of Civil Engineers, Houston, Texas; and William R. Ratliff of the American Consulting Engineers Council, Houston, Texas.

The Award of Merit went to two projects. One went to the Mount Saint Helens Eruption Recovery in Cowlitz County, Wash. and Ore. The design agency was the Portland District.

The other project was the Tioga-Hommond Lakes in Tioga County, Pa. The design agency was the Baltimore District.

The Honorable Mention went to three projects. One went to the Dworshak Crack Repair in Clearwater County, Idaho. The design agency was the Walla Walla District.

The second project was the Rehabilitation of Chesapeake City Bridge and Delaware Canal in Chesapeake City, Md. The design

(See page four)

Environmental awards

(From page three)

agency was the Philadelphia District.

The third project was the Gantry Crane Repair in Gavins Point, Neb. The design agency was the Omaha District.

ENVIRONMENTAL

The three jury members were Jack F. Kamman of Ducks Unlimited Inc., Southlyme, Conn.; Dr. Lydia Thomas of Mitre Corp., McLean, Va.; and William L. Landahl of Jackson County Parks and Recreation, Blue Springs, Mo.

The Honor Award went to the Confined Disposal Facility/Fresh Water Marsh Restoration in Pointe Mouille, Mich. The design agency was the Detroit District.

The Award of Merit went to three projects. One went to the Environmental Notch Program on the Missouri River, Neb., Iowa, and Mo. The design agency was the Omaha District.

The second project was the Little Goose Juvenile Fish Bypass Facility on the Snake River, Wash. The design agency was the Walla Walla District and the design firm was Kramer, Chin and Mayo Inc.

The third project was the Ethnobotanical Mitigation Program in Sonoma County, Calif. The design agency was the San Francisco District and the design firm was the Sonoma State University Academic Foundation Inc.

The Honorable Mention went to four projects. One went to the Wastewater Land Treatment System in Rend Lake, Ill. The design agency was the St. Louis District.

The second project was the Modular Refuse-fired Steam Plant in Fort Eustis, Va. The design agency was the Norfolk District and the design firm was Vansant and Gusler Inc.

The third project was the Jean Pierre Chouteau National Recreation Trail in Rogers, Wagoner and Muskogee Counties, Okla. The design agency was the Tulsa District.

The fourth project was the Sky, Land, Water, People Environmental Awareness Information Exchange Bulletin produced by the Pittsburg District.

On-line is available

by Jean Schmidt, AS-L

On-line or interactive searching is a method of acquiring specifically selected information from several different sources.

A search is carried out on a terminal located in the St. Paul District Technical Library, which is connected to the DIALOG Information Service in Palo Alto, Calif. DIALOG has been serving users since 1972 and now offers more than 130 data bases containing more than 50,000,000 records.

Usually a data base is confined to a particular discipline, such as engineering, environment, water resources or management. Within these broad fields, a search can be modified to focus on very specific interests.

Search results can be printed at the terminal, doing in minutes what might take several hours to do manually.

Beginning in February, individuals are invited to use the terminal for their own searches. Learning to search is not difficult. The basics can be self-taught through the manuals available in the library.

Most on-line searches can be completed in 10 to 15 minutes and charges are based on the actual time on-line.

As an alternative, the library staff can perform the on-line searches for you and the costs of these searches will be absorbed by the library.

Demonstrations of on-line searching can be arranged by contacting me Mondays through Thursdays at 725-5921. In order for everyone to see the screen, groups should be limited to five or six people.

It would also be beneficial if you could advise me of a search topic of interest to you or the group at the time you make an appointment. This would give me time to select the most useful data bases.

If you would like additional information about on-line searching or are interested in topics which can be searched, stop by the library in Room 1120.

People

CONGRATULATIONS go to the following new moms and dads: Heidi and Greg Frankosky, ED-D, on the birth of son John Frank on Dec. 25 at 5 lb., 9 oz.; and Monica and Mark Koenig, CO-CC, on the birth of son Jonathon Paul on Jan. 18 at 9 lb., 10½ oz.

DEEP SADNESS is felt on the death of retiree Harold T. Johns, 77, resident of Amery, Wis., on Dec. 30. Johns worked with the district as a civil engineer from the 1950s to mid-1970s. He worked with the Construction Division, the Hydraulics Branch and the Design Branch. He is survived by his wife, Pauline.

FOND FAREWELL and best wishes go to the following who retired recently: Joseph V. Stoltman, lock and dam operator at Lock and Dam 5A, on Jan. 9 after approximately 30 years of federal service; Robert W. Church, rivers and harbors construction maintenance foreman on the Derrickbarge Hauser, on Jan. 11 after approximately 20 years of federal service; and Jack M. Bemis, rivers and harbors construction maintenance foreman on the Derrickbarge Hauser, on Jan. 22 after approximately 29 years of federal service.

FOND FAREWELL and good luck go to the following who left the Corps recently: Merlyn M. Ruff, L/D 4; Joseph M. Polson, DO; David S. Marshall, ED-D; Thomas R. Langreck, L/D 4; John P. Herd, Pine River Dam; Donald J. Tomany, L/D 3; Karen L. Gulden, DO; Lisa M. Garcia, SP; Guadalupe Santos, EP-D; Wallace W. Burow, DC-F; Charles M. Mitlyng, Lac Qui Parle Lake; Randall D. Funk, ED-PB; Timothy L. Booker, ED-GH (transferred to the U.S. Department of Energy); and Pamela J. McFaden, PA (transferred to the Veterans Administration).

SINCERE SYMPATHY is extended to Janice A. Wallace, EP-R, on the recent death of her father.

CONGRATULATIONS go to Jeanne Stephan, daughter of Carl Stephan, ED-PB, on the recognition of her photograph entry into the Young Minnesota Artist competition held by the University Gallery, University of Minnesota, Minneapolis, Minn. Her photo is part of an exhibition which opened Jan. 10 in the Northrup Memorial Auditorium at the university.

Crime prevention is stressed

by Eunice Beran, EM

The week of Feb. 7-13 has been designated as Corps of Engineers Crime Prevention Week.

A vital part of crime prevention is security awareness. We often allow ourselves to be robbed or burglarized because of carelessness or apathy, such as failing to remove the ignition key from our parked automobile, not locking doors or closing windows in our home, or leaving cameras, binoculars, tape recorders or other small portable office equipment on desktops at the close of our working day.

Government equipment and property, as well as private property, must be secured. When leaving your work area unattended, give the area a quick "security" glance.

Is there something out in the open that might look tempting to a thief? Is there something that could be easily toted away by a thief? If so, tuck it away and lock it up!

Remember--crime is the thief's business; prevention is yours.

Abraham Lincoln's Birthday



February
12th

Around the Corps

NEAR ALTON, Ill., on the replacement project of Lock and Dam 26 on the Mississippi River, the contract for the first stage of the project has been awarded to the joint venture of S.J. Groves, Guy Atkinson Co. and Gordon H. Ball Inc. for approximately \$132 million. The complete project calls for construction of one 1,200-foot lock and a new gated dam with nine tainter gates. The project is scheduled for completion in 1989 at an estimated cost of \$871 million. Construction began on the project in fall 1979. The first stage cofferdam diverts the river's flow in order to allow work on the riverbed. The next major contract is scheduled to be awarded in early 1984 for construction of the lock.

IN ZARQA, JORDAN, the Middle East Division is assisting the Jordanian armed forces in construction of a \$50-million armor rebuild facility. The facility will be capable of depot level rebuild of American-made tracked equipment, such as tanks, for the Jordanian army. The Corps is also responsible for procurement of machinery, tools and equipment for the facility. Jordan awarded the construction contract to John Laing International of London in April 1980 for nearly \$40 million. The 30-month contract should be complete in October 1982.

AT EMSWORTH LOCKS AND DAM, Pa., on the Ohio River, the Corps facility is undergoing a \$24-million rehabilitation. The firm, Morrison-Knudsen Co. Inc., was awarded the construction contract in October 1981 from the Pittsburgh District. The project began in late 1981 and will continue through 1985.

IN HANOVER, N.H., a groundbreaking ceremony took place Nov. 23, 1981 for the Frost Effects Research Facility at the U.S. Army Cold Regions Research and Engineering Laboratory. The building will be constructed at a cost of \$6.3 million. It will provide the capability to assess the influence of artificially created winter conditions on the performance of engineering structures such as foundations, pavements and underground utility lines. Completion is scheduled for spring 1983.

NEAR NEW ORLEANS, La., the Corps' new large class hopper dredge Wheeler was christened

Dec. 12, 1981. Avondale Shipyards has been constructing the dredge since the contract award in fall 1978. Total cost of the construction contract is about \$70 million. Capable of dredging any deep draft waterway or harbor in the world, the Wheeler will work primarily in Southwest Pass, the Mississippi River's major outlet to the Gulf of Mexico. The Wheeler is designed to hold a volume of 8,400 cubic yards of dredged material.

Around the district

ANYONE ANSWERING REQUESTS for items sold to the public (e.g., navigation charts, maps, reports, photocopies, etc.) should ask that checks be made payable to "FAO, U.S. Army, St. Paul District." Checks are no longer made out to the "Treasurer of the United States" because the checks are now being handled by the finance and accounting officer.

AT LOWER ST. ANTHONY FALLS Lock and Dam, Minneapolis, Minn., a supporting arm on one of the three dam gates snapped on Jan. 17, dropping the gate. A bulkhead has been placed to temporarily close the gap and hold the pool level for the Northern States Power Company generating plant in that area. The Corps will attempt to make repairs on the gate before the high water of the spring runoff.

IN ST. PAUL, Minn., Minnesota Rideshare Program applications are posted on hallway bulletin boards. The program gives information on car pooling, van pooling and bus riding.

MEN - WOMEN

**Job training in the
Army Reserve
can pay off for
a lifetime.**

Black history is recognized

by Sharon Brown, EE

February is designated as the National Afro-American (Black) History Month. To commemorate this special event, a display will be exhibited in the 12th floor display case in mid-February.

On Jan. 15, the birthday of Martin Luther King Jr. was celebrated nationwide. In recognition of this great leader and humanitarian, his famous speech, "I Have A Dream," is shared with you.

I HAVE A DREAM

"I say to you today, my friends, that in spite of the difficulties and frustrations of the moment I still have a dream. It is a dream rooted in the American dream.

"I have a dream that one day this nation will rise up and live out the true meaning of its creed: 'We hold these truths

to be self-evident; that all men are created equal.'

"I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character.

"I have a dream that one day every valley shall be exalted, every hill and mountain shall be made low, the rough places will be made plains, and the crooked places will be made straight, and the glory of the Lord shall be revealed, and all flesh shall see it together.

"With this faith we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood.

"With this faith we will be able to work together, to pray together, to struggle together, to go to jail together, to stand up for freedom together, knowing that we will be free one day."



Toastmasters promotes equality

by John Blackstone, ED-GH

Life is like a ladder. It seems like I am some place in the middle. I have always had people above telling me what to do and others below that I direct.

People telling me to perform a task at work, arguments in the state legislature about how much in taxes I will pay, and don't forget the unspoken social customs that I follow.

Likewise, I must direct people at work, ask my boss questions, make sure that I'm getting my money's worth and tend to the kids.

Almost everyone I know is in this situation on the ladder. Most of us do this with relative ease.

However, it can prove to be a lonely situation as I try to maneuver up the ladder. I sometimes find this perch rather lonely. Almost always, I find it necessary to be aware of who is above and below me.

One thing I want out of life is a sense of camaraderie that comes from a group of equals. As I rush to catch a bus or get through a light before it changes, I lose this feeling.

I have discovered an interesting aspect to life. At least it is interesting to me, so I will share it with you. The ladder of life must be necessary because everyone seems to be participating on it.

What happens if I take the ladder and lay it down? It becomes a bridge. A bridge that I can use to cross the chasm that separates me from others.

One organization that promotes equality and purpose, a quality that I want, among its members is Heritage Toastmasters Club.

Here, a diverse group of individuals come together as equals in the challenge of each other to become themselves as they work together using individual abilities to connect the separate parts.

I invite you to join us at Toastmasters on Thursdays at noon in the sixth floor PEDC rooms.

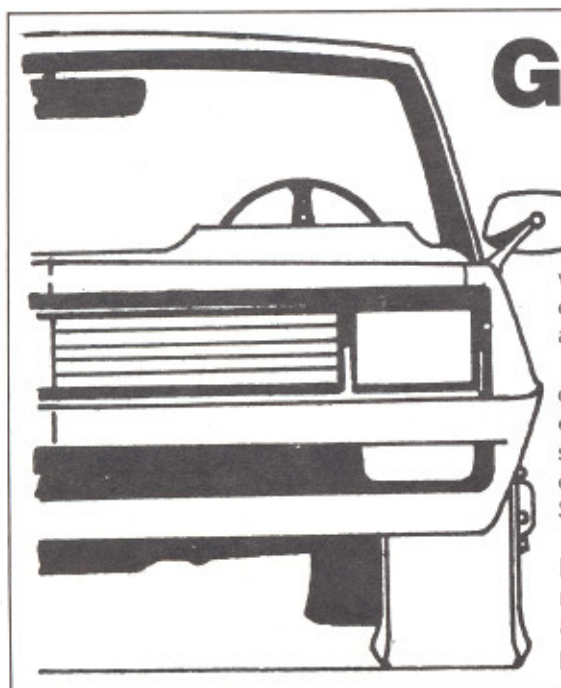
Speech contest scheduled

Communicating is an art that many of us take for granted. Toastmasters International believes that communicating is improved through competition.

The international contest begins at the club level on March 4 at noon. Toastmasters will host a club speech contest.

The winner from the club level will compete against four other contestants on March 12 in the area 11 speech contest.

If you are interested in attending either contest, contact John Blackstone, associate area 11 governor, at 725-7704.



GIVE-AWAY!

It's a cold Monday morning; you bundle up and dash out to start your car. As your engine slowly groans to life, you decide it's too cold to stay out while it warms up. You leave the engine running and dash back to the warmth of your kitchen and another cup of coffee.

You finish the cup, bundle up again and dash out . . . only to find your car gone. Somewhere else another car will be stolen within 33 seconds, and these thefts will add up to about one-fifth of all crimes committed in the United States.

Why make it easy for a thief to take your car? Leaving your car unattended with the engine running is like giving it away. Turn off the engine and lock up whenever you leave your car and pocket your keys . . . or Tuesday you walk!

Undertows

by Henrik C. Strandkov, CO-RF

HINT #2

Here is a good, hard brain-teaser to keep your mind warmed up during this cold weather.

You have applied for a job in the quality-control department of the Hustler Pool Ball Company.

The interviewing supervisor is almost fanatical about both the quality of the company's product and the efficiency of his employees. He has developed a test to determine whether you may be the kind of employee he likes.

THE TEST

You are given 12 pool balls numbered one through 12. They appear to be of uniform size and weight, but they are not. One ball is slightly heavier or lighter than the other eleven.

You are also given a simple balance scale, each tray of which is large enough to hold six pool balls.

To successfully pass the test, you must determine which one of the 12 is the imperfect ball, and you must also determine whether it is lighter or heavier than the others.

You must do all this by using only the balance scale and you are allowed only three weighings!

Each weighing consists of placing an equal number of balls in each tray and observing what happens. The balls must be placed on a tray more or less simultaneously; in other words, adding six balls to each tray one at a time and calling the whole process one weighing would be cheating.

HINT #1

Obviously, any solution to the problem will actually be a series of solutions that will allow you to find the imperfect ball in three weighings no matter what happens on the first and second weighings.

For example, if you choose to use less than six balls on each tray for your first weighing, there are two possible outcomes--either the scales will balance or they won't.

Your overall solution to the problem must cover both outcomes of the first weighing, and it is likely that different steps will be required depending on what happens. Nothing may be left to chance!

This would be a simple problem if you weren't limited to three weighings.

You might, for instance, keep weighing one ball against another until the scales didn't balance. Then you would know that the ten balls not being weighed at that point were all perfect, and it would be easy to use one of them to ascertain the imperfect ball and the fact of its lightness or heaviness.

With only three weighings, however, you must extract the maximum amount of "information" possible from each weighing.

For instance, it should be intuitively obvious that weighing only one ball against another one for your first weighing would gain you almost no information.

If, as is likely, the scales balanced, you would only have learned that those two balls were perfect. You still have ten balls about which you know almost nothing and only two more weighings.

You are sunk already.

HINT #3

Do you see that weighing six against six as your first step will not give you a certain kind of information that every other combination (five against five, four against four, etc.) does provide?

Which combination is likely to provide the most of this kind of information?

HINT #4

If you can't answer #3, how about this: assume you were foolish enough to weigh one against one as your first step. You get lucky, however, and the scales don't balance.

Do you see why only one additional weighing is needed to identify the imperfect ball and determine whether it is light or heavy?

HINT #5

It may be too obvious to be worth mentioning, but you do realize, don't you, that a tray that goes down during a weighing contains no ball that is light?

(See page 11)

Resources available for family management

From the "Military Family," Vol. 2, No. 1, January--February 1982; Military Family Resource Center, Springfield, Va.

There are many resource materials in existence which apply to family matters, and it is sometimes difficult to keep up with those which are most effective and current. The following are available:

FINANCIAL MANAGEMENT

Bank of America Consumer Information Reports. Bank of America, Box 37000, Dept. 3120, San Francisco, Calif. 94137; 1976-1981. Individual copies, no charge. Minimal charges for bulk copies.

Information and suggestions on financial management, writing checks and saving money are provided in a series of 27 consumer education reports, which range from two to six pages.

Sampler of topics: ways of saving money, establishing credit, preparing a personal financial statement, organizing income tax information, managing credit, balancing check books and planning retirement.

A Guide to Budgeting for the Family, by Lucile Mark. Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402; 1976, 14 pp., \$2 per copy.

This pamphlet provides families with a practical guideline for developing and carrying out a budget. Outlines steps in budget planning such as determining goals, estimating income and expenses, repaying debts. Tips on record-keeping and consumer credit. Budget forms included.

Teaching Children About Money, by Grace Wernstein. Public Affairs Committee Pamphlets, 381 Park Ave. So., New York, N.Y. 10016; 1981, 28 pp., 50 cents per copy for first nine copies, less for bulk orders.

Provides parents with suggestions on how to teach children of different ages about managing money. Also discusses pros and cons of allowances and other questions parents have regarding money and their children.

VIOLENCE AND ABUSE

A Family Affair. The 16mm film is available on a free loan basis from RHR Film Media, 9 E. 38th St., New York, N.Y. 10016,

(202) 686-9833; 1981, 26 minutes, narrated by actor Ed Asner.

The film follows a middle class family with a history of violent interaction through an episode of spouse abuse that results in criminal prosecution.

Subject areas included are the legal options available to abused women, the role that the criminal justice system can play in responding to a woman's need for protection and safety and in preventing subsequent abuse.

Dramatic portrayal of court proceedings gives a strong message that spouse abuse is not simply a family matter, but also a crime that is punishable by law.

Shatter the Silence. Phoenix Films Inc., 468 Park Ave. So., New York, N.Y. 10016; 1981, 29 minutes, rental is \$40 per day.

This 16mm film is designed to create greater public awareness about the problem of incest. It portrays the life of an adolescent girl who has been sexually abused by her father.

The film underscores the feelings of confusion, guilt, fear and isolation experienced by the daughter, as well as the effects of the abuse that carry over into adult life.

PARENTING

Minnesota Early Learning Design, by Nancy Belbas. Executive Director, Minnesota Early Learning Design, 123 E. Grant St., Suite 612, Minneapolis, Minn. 55403; 1979, 4 pp., no charge.

Describes a parent education program for first-time parents, which consists of a series of bimonthly meetings beginning at the seventh month of pregnancy and ending at the child's second birthday.

The groups are led by trained parent volunteers who discuss topics in the area of health, child development, child guidance, family management and parent development.

Single Parent Families, by Patricia Ryan. Supt. of Documents, U.S. Govt. Printing Office, Washington, D.C. 20402; 1981, 40 pp., \$3.75.

A publication that will reassure single parents that they are fully capable of rearing healthy, happy children. Gives suggestions on child rearing and describes the stages of feelings that a child experiences in losing a parent.

Blackman wins again

by Wilbur Walleye

For the third year in a row, Robbin Blackman has won the Environmental Resources Branch fishing contest.

Blackman nosed out John Nosek 67 points to 65½ points. This is the closest contest the branch has had in the six years of the annual event. Gary Palesh was a distant third with 47½ points.

Fifteen fishermen entered a total of 130 fish in the contest. Panfishing appeared to retain its popularity with branch fishermen as 67 of the 130 fish entered were panfish.

Noteworthy fish entered this year were a 19½-inch brown trout by Dan Wilcox, a 14½-inch black crappie by Bob Post, a 19½-inch largemouth bass by Nosek, a 15 7/8-inch white bass by Blackman and a 12½-inch yellow perch by Mike O'Keefe.

Undertows

(From page nine)

HINT #6

What exactly do you know about each one of those balls on the tray that went down?

HINT #7

Try working backwards. By the time you reach the third weighing, what is the greatest number of balls you can be in doubt about and still solve the problem?

AFTERTHOUGHTS

This is a tough problem and I'll be the first to admit that I wasn't able to figure it out on my own. But if you work at it and study the hints, you may be able to get it. Have fun!

By the way, I know of only one first weighing that will enable you to cover all possibilities in three weighings.

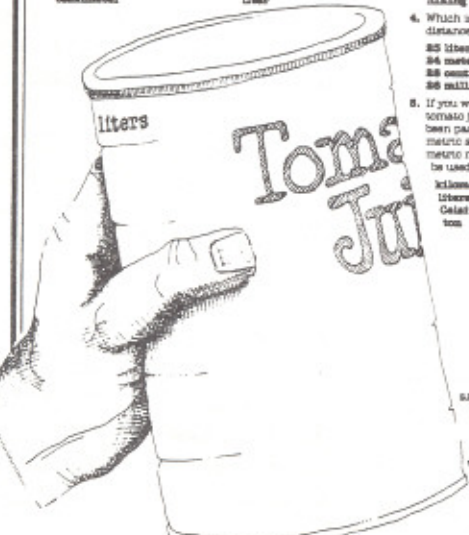
I know of three ways to do the most important step of the second weighing, but there may be more.

Metric: The Choice is Yours

Test your metric knowledge: Circle the correct answer to each of these ten multiple choice questions.

- What metric measure would you use to measure the length of a pencil?
gram
Celsius
liter
centimeter
- When weighing a mouse in metric measure, which word would you use?
kilograms
meter
Celsius
liter
- If the temperature outside is 35 degrees Celsius, what will you most likely be doing?
cross country skiing
ice skating
swimming
hiking
- Which is the shortest distance?
25 liters
25 meters
25 centimeters
25 millimeters
- If you were buying tomato juice that had been packaged in a metric sized can, what metric measure would be used?
kilometers
liters
Celsius
ton
- What is the metric measure used for snow size?
millimeters
centimeters
liters
grams
- At birth, which one of these babies might weigh 3 kilograms?
mouse
elephant
fox
human
- Which of these is about the same size as a liter?
gallon
quart
ounce
inch
- About how much does a paper clip weigh?
1 kilogram
1 liter
1 gram
1 meter
- Which one of these measures is about the width of an average doorway?
meter
kilometer
gram
Celsius

METRIC QUIZ



Traveling on business can be fun

by Pam McFaden, PA

BISMARCK, N.D.

In this last article of the travelogue series, I will take you to places where Corps employees travel from time to time and I will also try to give you ideas on different things to do while away from home.

HUNTSVILLE, ALA.

Starting with Huntsville, Ala., where many employees travel for training to the Corps of Engineers Training Center, there are two restaurants located near the center. The first is the T.P. Crockmeier's which is in walking distance and the Fogcutter, which you may prefer taking a taxi to.

There is fishing year-round and other water sports are very popular, too. There are four YMCA's each having a swimming pool, lighted baseball and football field and some even having a tennis court.

At the Brahan Spring Park you will find an Olympic-size swimming facility that is open year-round and has accommodations for the handicapped.

There are two municipal golf courses, two driving ranges and two miniature golf courses. Maybe your interest lies in the theatres; Huntsville has 12 theatres and two drive-in theatres for your pleasure.

An interesting place to visit is the Alabama Space and Rocket Center, located on Tranquility Base. There is a 46-passenger spaceship, called Lunar Odyssey and is complete with rocket lift-off, landing and "g" forces. It offers the visitor an experience of all sights and sounds of space travel; you will be given a mission to transfer a resupply pod from cargo bay to space Station Orion II, already in the earth's orbit.

DUBUQUE, IOWA

In Dubuque, the oldest city in Iowa, you may find a guided tour of Crystal Lake Cave an experience that you will not forget. It is an electrically lit cave and has an underground lake.

The Mathias Ham Museum, located on Lincoln and Shiras Streets, offers the visitor with Indian artifacts, an early lead mining exhibit and geological room. There is also a log cabin that was built in 1827.

Old Shot Tower is located on the riverfront and was built in 1856 for molding lead shot and is one of the few in the country.

In Bismarck, N.D., you may find Camp Hancock Museum an interesting place to visit. It is located on First Street and Main Avenue and houses relics of the settlement of North Dakota. At the Dakota Zoo, located at the end of the Missouri Bridge, you will find an open air zoo with native, exotic and domestic animals.

For the fisherman, the Oahe Game Management Area, located on the Lewis and Clark Trail, offers you fishing, boating, primitive camping and seasonal hunting.

The State Historical Museum located in the Liberty Memorial Building has Indian artifacts, ethnological, historical and natural science material.

GARRISON, N.D.

A tour of the Garrison Dam may interest you if you have not been there before, or maybe going on guided tours of the Audubon National Wildlife Refuge and Garrison National Fish Hatchery where you will be able to see how northern pike, walleye, small mouth bass and rainbow trout are raised.

CHICAGO, ILL.

The next large location that you may visit some day is Chicago, Ill. There you will be able to rent a car, take a taxi or ride the public transportation (bus, subway and elevated transit lines).

One of the sites that may be interesting is the Adler Planetarium with astronomical instruments, space age hardware, models demonstrating astronomy's history and development. There is also an amateur telescope maker's shop and a solar telescope used in summer to detect sun spots and a filmed sky show.

The Art Institute of Chicago is famous for its paintings and watercolors ranging from the 13th century to contemporary, and the 19th and 20th century French collection is the greatest in the world. Also located there is a Junior Museum that is designed especially for children and has an auditorium, library, workrooms and gallery.

One of the world's finest opera houses is located in Chicago and it is the Chicago Opera House; tours are available by appointment.

(See page 13)

Traveling on business

(From page 12)

Maybe you would like to visit Chinatown, a picturesque community with gift shops and restaurants serving authentic Cantonese food.

For the golfers, there is Jackson Park, the third largest of Chicago's parks. It offers an 18-hole golf course, playground, tennis court, bicycle and bridle paths.

The John G. Shedd Aquarium has an exhibit of 10,000 fish and sea creatures. The special attraction is the coral reef, which highlights Caribbean fish with daily feedings by scuba divers.

WASHINGTON, D.C.

Many Corps employees also travel to Washington, D.C., a place of many historical sites and interesting things to see.

First of all, there is the Arts and Industries Building with items from the U.S. Army and the U.S. Navy, patent office and the Smithsonian; manufactured goods and machinery. There are 37 states and various foreign nations represented there.

The Bureau of Engraving and Printing may be one of the attractions you may want to see. Here you can go on a self-guided tour to see how the government designs, engraves and prints money, bonds and revenue and postage stamps.

The Explorers Hall, National Geographic Society Exhibits, depicts the famous National Geographic expeditions. The center piece of the hall, which encompasses the entire first floor of the building, is said to be the world's largest free-moving globe suspended over a reflecting pool. Recorded narrations and films are there for your use.

The Freer Gallery of Art contains bronzes, paintings, jade, pottery, sculpture and manuscripts from the Orient, Near East and India.

These were just a few of the places that you may find yourself traveling to. If you need more information on the place that you will be going, contact the St. Paul District travel coordinator at 725-7507, as they carry tour books that give you information on activities from sports, tours, restaurants, night spots, etc.

Where ever your trip takes you whether on business or for pleasure, I hope that the information that I have been able to give you in the past few months has been helpful in making your decision on the right location to spend your leisure time.

Have fun and take the time to enjoy the beauty of life in every shape and form.

For Single Taxpayers

■ If you maintained a home for a parent, child, or other relative, you may be able to file as Head of Household and pay less than filing as a single taxpayer.

■ If you pay for the care of your child or a disabled dependent so you can work, you may be able to claim a credit up to \$400 if you have one qualifying dependent, or up to \$800 if you have two or more qualifying dependents.

■ If your income for 1981 is more than your average income for the past four years, try "income averaging." It could save you money. See Schedule G, (Form 1040,) Income Averaging.

IRS TAX TIPS

For Single Taxpayers

■ If you pay a preparer to complete your tax return, you should receive a copy of your tax return in addition to the copy which is filed with the IRS.

■ If you receive alimony, it is considered taxable income to you. On the other hand, if you are required to pay alimony you may deduct these payments from your gross income. You need not itemize deductions to claim alimony payments.

On Tax Credits

■ Tax Credits are amounts you can subtract directly from the tax you owe, thereby reducing the amount of your tax on a dollar-for-dollar basis.

■ Earned Income Credit—If you had less than \$10,000 of total income and have a child, you may be able to claim this credit if you file as married filing jointly or as head of household.

Check your tax instructions for details.

1981 fishing contest statistics are announced

by Wilbur Walleye

The 1981 St. Paul District Fishing Contest officially ended on Dec. 31, 1981. The final standings are located in this issue of Crosscurrents. An awards ceremony will be held on Feb. 17.

Dave Haumerson, who had a great fishing year, took first place as Fisherman of the Year as well as the gamefish and other categories.

Margaret Reilly took first place in the panfish category and Dale Mazar took first place in the trout category.

The 1982 contest rules are located in this issue of Crosscurrents. The representatives of the fishing committee for 1982 are Wayne Koerner, ED-PB; Greg Eggers, ED-GH; Mike O'Keefe, ED-ER; Don Koehler, CO-RF; Dale Mazar, ED-D; and Tom Oksness, CO-PO.

Representatives will jointly administer the contest and rule on any conflicts which arise during the year.

Branch competition is encouraged and employees who want to be considered should contact the committee by July 1982.

HAVE YOU HEARD THAT...

* A luncheon has been scheduled for Feb. 10

at which Planning Branch (the winners) shall cause the Environmental Resources Branch (the losers) to "suffer the slings and arrows and miscellaneous verbal abuse that may be heaped upon them by the winning branch." There appears to be no end to the rewards of catching fish.

* Stu Dobberpuhl did a quick cost benefit-analysis on the value of a northern pike while fishing on Mille Lacs Lake. He was bringing this "big" northern up out of the fish hole when the line snapped, requiring quick eye-hand coordination to pull the fish out without losing a finger. It worked; unfortunately, the fish went crazy and flipped under the floor of the fish house, out of reach. Dobberpuhl, Paul Madison, Mike Fix and Grant Westall frantically tried to capture the northern which was said to be snapping like an alligator. The fish was finally subdued.

* Bill Spychalla has his ice fishing timing down. "It's a snap," says Spychalla. "All you do is bait your hook, throw your line down the hole and take a nap while the other guys watch your line." Spychalla landed a 5-lb. burbot after it had first been caught by Marty McCleery and Stan Kumpula, who had found it wound around their lines.

ST. PAUL DISTRICT FISHING CONTEST RULES		The categories and species of fish included in the contest are:	
		Species Size or Species	Minimum Size or Species
1. Fish must be legally caught by hook and line in unimpounded waters of the State of New York (Ontario, Herkimer, Hamilton, and Oneida Counties) and the Districts of Lake Ontario, Lake Champlain, Lake George, etc.			
2. The contest begins on all the above mentioned dates. Fish must be caught while participating in one of the following categories:			
3. All catches must be submitted to an official weigh station in a number of the District Administrative Offices.			
4. The contest will run from January 1 through December 31, 1981. Entries must be submitted within 48 hours after the fish is caught. All entries must be submitted no later than February 21, 1982.			
5. All fish will be weighed to the nearest ounce in the case of fish species. Official weighing stations will be used. Total length should be obtained by laying the fish on a clean surface and measuring its length from the tip of the snout to the end of the tail.			
6. Branch competition is encouraged. The individual must declare his entry in writing to the committee at the time the fish is weighed. For branch competition, official branches are: Gamefish, Panfish, Trout, and Other Species. All entries must be approved by the District Administrative Offices by July 1, 1982.			
7. Prizes will be awarded in the following manner:			
A. Bank Points - Points will be distributed within each species as follows:			
	1st place - 10 points		
	2nd place - 5 points		
	3rd place - 3 points		
	4th place - 1 point		
B. Bank Points - For each large fish entered in the contest, an individual may receive "bonus" points. The bonus points will be credited for each fish entered which meets or exceeds the minimum size criteria as listed in these rules for species. Each individual fisherman is limited to a maximum of 10 bonus points per species. (In the absence of bonus points, a photograph of the fish or an official weigh certification is necessary.)			
C. Special Prizes - An additional five bonus points are available for fish of certain species which meet or exceed the minimum size criteria as listed in the contest rules. To be eligible for the special prizes, the fish must be weighed at a State certified scale and the address must be given to the weigh station. The special prizes are included in the bonus points (total of 10 per fisherman) per species.			
D. Prizes			
Prizes will be given in the following manner:			
A. The individual with the most points at the end of the year will be named "Fisherman of the Year."			
B. The branch with the most points at the end of the year will be named "Fisherman of the Year."			
C. The individual with the most points at the end of the year in each of the four categories, i.e., game fish, panfish, trout, and other will receive special recognition.			
D. Prizes for other outstanding or special performance will be given.			
E. The 1982 contest will be administered by representatives of different branches of the District. Representatives for each year are:			
Game Branch	- Planning Branch		
Trout & Panfish	- Environmental Resources Branch		
Other Species	- Environmental Resources Branch		
Gamefish	- Administrative Branch		
Trout & Panfish	- Design Branch		
The District	- Project Operations Branch		
11. Game and Trout will be judged superior under the rules category and Lake Ontario and Lake Champlain will be judged together under the Game and Trout category. The "Game" points, but judged individually for trout and panfish.			
12. Individuals will receive points in Lake Superior and Lake Michigan including tributaries adjacent to the District branches.			
13. Trout and other species of fish are listed elsewhere.			
14. Bonus points or trophy medals, as indicated, are not awarded for these species.			

STATUS REPORT : ST. PAUL DISTRICT FISHING CONTEST

as of 31 DECEMBER 1988

DISTRICT FISHERMAN RANKINGS	
(name)	(points)
1) Dave Haumersen	117 1/3
2) Don Kohler	60 1/2
3) Dale Mazar	57
4) Wayne Koerner	47
5) Dan Wilcox	46

BRANCH RANKINGS	
(branch)	(points)
1) PLANNING BRANCH	223 5/6
2) ENVIRONMENTAL RES.	183 1/6
3) DESIGN BRANCH	143
4) REGULATORY FUNCTION	122
5) GEOTECH., HYD, HYDROL.	46

category

leaders

GAME FISH			
(name)	(pts)	(br)	
1) Dave Haumersen	39	PB	
2) Stan Kumpula	29	GH	
3) Wayne Koerner	14	PB	
4) Tom Heyerman	14	D	

PANFISH			
(name)	(pts)	(br)	
1) Margaret Reilly	25	AS	
2) Dave Haumersen	23 1/3	PB	
3) Chuck Crist	22	PB	
4) Gary Palesh	18 1/3	ER	

TROUT			
(name)	(pts)	(br)	
1) Dale Mazar	47	D	
2) Bruce Norton	42	RF	
3) Dan Wilcox	37	ER	
4) Don Kohler	33 1/2	RF	

OTHER			
(name)	(pts)	(br)	
1) Dave Haumersen	55	PB	
2) Wayne Koerner	33	PB	
3) Tom Heyerman	23	D	
4) Don Kohler	22	RF	

SPECIES

RANKINGS

(name)	(size)	(pts)	(br)
MUSKELLUNGE:			
1) Stan Kumpula	42 3/4	20	GH
2) Dave Haumersen	31 1/2	7	PB
3)			
NORTHERN PIKE:			
1) Steve Schwager	37	15	PB
2) Tom Heyerman	32 1/4	7	D
3) Stan Kumpula	30 1/4	4	GH
4) Stu Dobberpuhl	30 1/4	4	GH
WALLEYE:			
1) Dave Haumersen	28 3/4	15	PB
2) Wayne Koerner	26 1/4	12	PB
3) Fred Whebbe	25 1/2	10	D
LARGEMOUTH BASS:			
1) John Nosek	19 1/2	10	ER
2) Dave Haumersen	19 1/4	12	PB
3) Stan Kumpula	17 3/8	5	GH
SMALLMOUTH BASS:			
1) Dale Mazar	16 3/8	10	D
2) Tom Heyerman	16 1/4	7	D
3) Frank Star	15 1/4	5	ER

(name)	(size)	(pts)	(br)
CRAPPIE:			
1) Fred Whebbe	14 7/8	15	D
2) Bob Post	14 1/2	12	ER
3) Dave Haumersen	14 3/8	10	PB
BLUEGILL:			
1) Margaret Reilly	10 1/2	25	AS
2) Gary Palesh	9 3/8	7	ER
3) Dennis Anderson	9 1/2	5	ER
PUMPKINSEED:			
1) Gary Palesh	8 3/4	10	ER
2) Dave Haumersen	8 5/8	12	PB
3) Ed DeLaForest	8 3/8	5	D
YELLOW PERCH:			
1) Micheal O'Keefe	12 1/4	15	ER
2) Scott Fryklund	12	7	RF
3) 3 Tied	11 1/2	3	
ROCK BASS:			
1) Diana Tschida	13 5/8	15	FA
2) Craig Collison	12	7	D
3) Chuck Crist	11	20	PB

(name)	(size)	(pts)	(br)
RAINBOW TROUT:			
1) Don Kohler	18	15	RF
2) Bruce Norton	17	7	RF
3) Greg Eggers	13 1/2	5	GH
BROWN TROUT:			
1) Bruce Norton	20	20	RF
2) Dan Wilcox	19 1/2		ER
3) Dave Ballman	15	5	RF
BROOK TROUT:			
1) Bruce Norton	12 1/2	10	RF
2) Jerry Smith	11	7	ER
3) Dick Beatty	10 1/2	5	ER
SALMON:			
1) Dan Wilcox (Chinook)	40	25	ER
2) Dale Mazar (Chinook)	39 1/2	22	D
3) Al Geisen (King)	38	10	D
LAKE TROUT:			
1) Dale Mazar (Tiger)	32 1/2	25	D
2) Carl Stephan (Rainbow)	27 1/2	7	PB
3) Bruce Norton (Stella)	27	5	RF

(name)	(size)	(pts)	(br)
BULLHEAD:			
1) Wayne Koerner	14 1/4	25	PB
2) Dave Haumersen	14 1/2	22	PB
3) John Nosek	14	5	ER
CATFISH:			
1) Dave Haumersen	23 1/2	15	PB
2) Don Kohler	20 1/4	12	RF
3) John Nosek	19 1/4	4	ER
SAUGER:			
1) Tom Heyerman	19 1/2	15	D
2) Wayne Koerner	18	7	PB
3) Dave Haumersen	15 5/8	5	PB
WHITE BASS:			
1) Don Kohler	15 5/8	18 1/2	RF
2) Robbin Blackman	15 5/8	18 1/2	ER
3) Dave Haumersen	15 5/8	10	PB
OTHER:			
1) Don Kohler (Eel)	29 1/4	10	RF
2) Tom Heyerman (Carp)	26 1/2	7	D
3) Dick Beatty (Bowfin)	24	3	ER
Dave Wilcox (Carp)	24	3	ER
D. Haumersen (Carp)	24	3	PB

ENGINEERS:



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