The saga of Richard in Saudi Arabia

by Richard Howard, CO-RF

Greetings from Al Batin, Saudi Arabia. For the benefit of those who are unfamiliar as to why and how I came to work in Saudi, I'll briefly explain. (See the September 1980 issue of Crosscurrents.)

In April 1980, the Corps of Engineers was looking for volunteers to travel to Saudi for a several month temporary duty assignment. I thought it would be interesting to see other parts of the world, so I applied. In June, I was amazed to discover that I had been selected along with Dave Christenson, ED-PB; John Bailen, ED-PB; and Bruce Ragen, CO-CT.

I left the Twin Cities on July 27 even though my flight was delayed by two hours due to a bomb threat. I arrived in London and stayed overnight since my connecting flight to Dhahran, Saudi Arabia, wasn't leaving until the next day.

I toured the heart of London--Trafalgar Square, Big Ben, houses of Parliament and Westminster Abbey.

Landing in Dhahran the next day was unique. As we came down the boarding ramp, security guards were everywhere. We were loaded into a bus and taken to the terminal where the customs officials were very thorough.

Meeting me in the terminal was a porter who couldn't speak English but did carry a sign of the Corps castle insignia. He worked for Morrison-Knutson/Saudi Arabian Consortium who were responsible for billeting their employees and Corps employees.

Staying overnight in Dhahran until I could catch a plane to Al Batin, I toured the incredible town. Every other lot had a new building going up, mostly concrete block construction. Many of the streets were torn up for new underground water and sewer pipes. I met an American (who worked for a large oil company) who warned me about the Saudi drivers; they don't have any traffic regulations and they drive with their horns.

Richard was back at his desk working in the St. Paul District in late October after a 90-day tour of duty in Saudi Arabia.

When I finally reached the job site out in the desert, I settled into my living quarters just outside of the King Khalid Military City in the Al Batin district. The city is still being built and not much of the city is visible.

The first work to be done consisted of building and equipping all of the installations needed to house the people and equipment needed to build the city.

I am working in the Contract Support Area, specifically in the Life Support Section. I've been assigned to coordinate and expedite all activities related to security, fire protection, transportation and air travel.

(See page three)
January 1981 will mark one year since I became editor of Crosscurrents. I need to know how you feel about the newspaper. Please complete the survey form on this page and return it to me in the Public Affairs Office, Room 1530. By answering a few questions, you will be providing me suggestions and comments on how the newspaper can be improved. Make your voice heard.

The final deadline for submitting all articles and photographs for the next issue of Crosscurrents is Nov. 21. *(Blanche Rom)*

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MAKE YOUR VOICE HEARD

Please complete this survey form, clip and return it to Crosscurrents Editor, Public Affairs Office, Room 1530.

What do you like about Crosscurrents?

What don't you like about Crosscurrents?

What kind of articles do you want to see less of?

What kind of articles do you want to see more of?

Have you contributed any articles or photos to Crosscurrents in the past 12 months? If not, why?

Any other comments or suggestions?

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Phone: (612) 725-7505

District Engineer
Public Affairs Officer
Editor

Colonel William W. Badger
James E. Braunz
Blanche Rom
Lake Rebecca project begins

A ground breaking ceremony for the Lake Rebecca Wildlife and Recreation Enhancement Project was held on Oct. 21 in Hastings, Minn.

The project is being managed by the St. Paul District, Corps of Engineers, with the sponsorship of the city of Hastings and the Minnesota Department of Natural Resources. Among participants at the ground breaking were Gov. Al Quie, Hastings Mayor Walter Peterson, City officials, Rep. Harry Sieben and Corps representatives.

Initial work on the two-year, $1-million project will be done this fall. Features of the enhancement project, aimed at creating needed wildlife and recreation resources for the Hastings area, include a dike to prevent a storm sewer from discharging into the lake, a control structure to provide an outlet for the lake, raising the lake by 2½ feet, day-use areas, trails and a boat launch.

Lake Rebecca, once used heavily for fishing and water recreation, began to deteriorate in the 1940s and the project is expected to help turn the clock back and provide the city with an important recreation asset.


Traffic systems meetings scheduled

Three meetings are scheduled to discuss the development and evaluation of strategies to improve the effectiveness of the nation's waterborne transportation system to meet demand needs over the next 25-year period.

The meetings will be held: (1) Nov. 13, 7:45 a.m.-4 p.m., Rosslyn West Park Hotel, Arlington, Va. (2) Nov. 18, 7:45 a.m.-4 p.m., Rodeway Inn Downtown, St. Louis, Mo. (3) Nov. 19, 8:45 a.m.-5 p.m., Bonneville Power Administration Auditorium, Portland Ore.

The meetings will address two topics: first, the assessment of the nation's future demand for waterborne traffic relative to current and foreseeable capability, and second, the consideration of conceptual strategies to improve the system's effectiveness.


Saga of Richard
(From page one)

The temperatures at my job site are high (100-120 degrees), and the humidity is low. Sometimes the winds are strong enough to blow sand and dust around and this is not too enjoyable.

One of the unique things about living here is the problem of obtaining cold water. The water coming out of the ground is quite warm and often when it is pumped into the water tower it becomes even hotter.

John and Dave arrived about two weeks after I did; they are also working in Al Batin. Dave has been with the crews doing construction blasting on the site. There have been some spectacular explosions associated with this operation. The dust and debris from the blasts occasionally reached hundreds of feet into the air. Air traffic above the blasting sites was supposed to be closed during blasting, but communication gaps sometimes occurred and planes took off.

John has been working in the office on construction drawings and estimation.

The biggest surprise I had was finding Bruce working at Ras Al Meshab. I was on a business trip there when I saw him. He was scheduled to work in Riyadh, but was sent to Ras Al Meshab to help inspect construction there. The place was interesting to visit; there is a nice beach on the Arabian Gulf. Unfortunately, there's been a chronic problem with the water supply because the base depends on a desalinization plant and it frequently breaks down.

I've been taking Arabic lessons since early September. The class meets three times per week and I found the alphabet not very difficult to learn.

Warmest regards,

prevent
broken hearts

Use your seat belt
Straub award given to Gartrell

by Roger Arndt, director of the St. Anthony Falls Hydraulic Laboratory, University of Minnesota

Dr. Gregory Gartrell, Jr. of the California Institute of Technology, was presented the Lorenz G. Straub Award for 1979. The award, established under the Lorenz G. Straub Memorial Fund, is given annually for a meritorious thesis in hydraulic engineering or a closely related field. Dr. Gartrell is the 13th winner of the Straub award.

Members of the award committee were Dr. Donald Harleman, Massachusetts Institute of Technology; Dr. Ven Te Chow, University of Illinois, Urbana; and I. The award was presented to Dr. Gartrell on Oct. 23.

A mention of thanks

The following letter of appreciation was received from Ronald H. Nicklaus, Mississippi River biologist, Wisconsin Department of Natural Resources:

"On behalf of the Wisconsin Department of Natural Resources and myself, we express our sincere thanks for a job well done for the assistance provided us by the crew of the crane barge Wade in transporting equipment for our waterfowl nest cover project. I was particularly impressed with the knowledge and skill with which the crew used their equipment and their interest in our project."

THE FAMILY OF MEL RIEMAN IS SHOWN IN THE LAKE ASHTABULA and Baldhill Dam visitor center in June 1980 at the dedication ceremony of the Mel Rieman Recreation Area in a photo recently received in the Public Affairs Office. The area is dedicated in memory of Mel, who was park manager of the site from September 1969 to June 1979. At the unveiling of the dedication plaque were (from left to right) Bill Goetz; Brian, Elaine, Shannon, and Sheila Rieman. Representing the Corps at the ceremony were Col. William Badger, Arlee Keys, and Bill. Also present were Steve Hoss, mayor of Valley City, N.D.; and Les Abraham, Barnes County Commissioner. Approximately 60 people were at the ceremony. The plaque will be mounted in granite and placed on the site, overlooking Lake Ashtabula. (Photo by Thomas Novak, Lake Ashtabula and Baldhill Dam)
Hydropower workshop scheduled

A one day workshop on the National Hydropower Study will be held on Nov. 20, at the Bonneville Power Administration Auditorium, Portland, Ore., from 8 a.m. to 4:45 p.m.

The workshop is designed to inform participants of the policy studies and to discuss the findings, conclusions and tentative recommendations of each policy study. The five policy studies, which are in various stages of development, address: environmental impacts, legal and institutional aspects, economic evaluation procedures, marketing and transmission, and technology assessment.


FEB members visit St. Anthony lab

On Sept. 18, 33 Federal Executive Board members and guests toured the St. Anthony Falls Hydraulic Laboratory, University of Minnesota.

Dr. Roger Arndt, director of the facility, discussed the responsibilities, activities and operations of the laboratory. The facility plays a significant role in the education and research program of the University of Minnesota as well as in direct service to the engineering profession.

Some of the other speakers were Peter Fischer and Don Benson of the Corps of Engineers, and John Skinner of the U.S. Geological Survey; they explained the work of their agencies as it relates to the laboratory.


Boatyard clean up plan reviewed

by Ken Brown

The Corps of Engineers on Oct. 20 identified and proposed to clean up areas of its Fountain City boatyard which are contaminated by polychlorinated biphenyls (PCB).

Andrew Damon of Madison, deputy secretary of the Department of Natural Resources (DNR), said that the proposal offered by the Corps is under review by the DNR to see if it meets state requirements.

"We don't know the depth to which the PCB has penetrated," Damon said. "Their (Corps) proposal is under review; no conclusion has been reached."

Larry Spering, Madison, of the DNR, said some of the contaminated soil of the boatyard will have to be removed. "Just how much is difficult to say until the Corps proposal is reviewed," he said.

PCB is an industrial chemical used in transformers and hydraulic fluids. It was banned from distribution and manufacture in 1979 because tests showed it caused cancer and birth defects in laboratory animals.

Preliminary samples taken in July at the boatyard showed a few spots in which the soil was contaminated with more than 50 parts per million (ppm) of the chemical, according to George Meyer, DNR lawyer in Madison.

Soil containing more than 50 ppm may not be dumped in a conventional sanitary landfill.

Sperling said the state is operating under federal regulations, which require PCB be placed in a dump licensed for the chemical. He said there are no dumps either in Wisconsin or Minnesota licensed to receive the PCB.

Extracted from "La Crosse Tribune," Oct. 21, 1980; La Crosse, Wis.

Room reservations needed early

by Delores Sudeith, AS

Users of conference rooms are asked to make reservations well in advance to be certain rooms are available.

Rooms 1219 and 1220 are used only for conferences/meetings; however, Rooms 1033 and 1515 are dual purpose (e.g., training and emergency operations) and may not be as readily available.

Call 725-7522 for reservations and room information. If you need special room set-up or furniture arrangements, request it when you reserve the room.
Schriever is only female L/D operator in the country

by Lea Guenther

Jean Schriever's employment with the Corps of Engineers has included many tasks. One interesting fact about her job is that she is the only female lock and dam operator in the United States. "It's not a job for someone who doesn't like to get dirty," she said, "and you've got to be able to do a little bit of everything."

There was quite a bit of furor at the St. Anthony Falls Lock and Dam in November 1978 when workers learned that a woman was arriving as a laborer in the Corps' Upward Mobility Program. That woman was Jean.

"The guys thought the new employee would be either an Amazon or a helpless, clinging vine," Jean said, and she felt it was natural that a male-only population might resent a female on the job.

"With a sense of humor, you can put up with anything," Jean said, and she was determined to do the best job she could to the best of her ability. She grew up on an Iowa farm and was well-acquainted with farm machinery, tools and maintaining equipment.

She emphasized that she doesn't pretend to be able to do things she can't and tries to learn new skills by watching older employees. "You must be able to ask for help rather than cause an accident," she said.

When Jean began to work at the lock and dam in 1978, the lock was "being battened down for winter." Employees had to replace guide rods and guide rams when the navigation season ceased in mid-December. The rams, which weigh 950 lbs. each and allow water to flow into the lock chamber, Jean explained, had been under water 20 years and were "rust-ed and barnacled."

As a laborer, she quickly learned to wear long johns, a down jacket and two pairs of socks, along with a hard hat and steel-toed shoes. She often worked standing in frigid water in 30 degrees below zero weather. She learned about large bodies of water and the stress which water places on steel.

She has taken her turn at climbing down into a valve pit to work above 25 feet of water. She has built scaffolding, made frames and poured concrete, and drilled through three floors of concrete reinforced with steel rods. She can weld, braise, solder, do carpentry and read blueprints.

And a lock and dam worker's training would not be complete without wielding a wire brush prior to painting equipment. She assisted in the installation of a solar heat-

ing prototype at the Upper St. Anthony Falls Lock and Dam, and also plumbed in a metering system which monitors water usage.

One of the more unusual tasks are greasing the lock gates in spring. Jean donned disposable coveralls and a safety belt, climbed down to the icy water and hung head down, dipping a special mitt into grease to grease the rubber seal on the gates. She was working upside-down over 16 feet of running flood water.

Also in the spring, the lock and dam gates must be maintained ice free when flood waters bring ice chunks down the river. A bubbler must be operated to keep ice from freezing on the gates and to maintain a 14-foot pool which feeds an electric company's turbine.

A lock and dam employee must be able to work rotating shifts, seven days on each shift, and get used to having days off in the middle of the week. He or she must ignore rain, snow, lightning, blistering heat and bitter cold.

Runaway barges must be caught by employees in life boats and tied off with lines that are 3/4 to 2" thick and very heavy when waterlogged. The employee assists in the rescue of those who fall or jump from bridges and in the retrieval of bodies from the river.

Due to recent heavy rain, the present level of the river is as high as it usually is in the spring. So lock and dam operators are busy flushing submerged, waterlogged debris downstream.

Another task is guiding visitors, including bussloads of school children, on tours of the facility.

Jean explains that barge traffic is a very cheap form of transportation. The energy expenditure to taxpayers for each lockage, including the operation of the electrically-powered hydraulic system, lights and public address system, is eight to 10¢. She adds that "We will lock anything through the locks including your canoe." Nine million gallons of water flow into the lock in the eight minutes it takes to fill the chamber.

After successfully completing the laborer position, Jean was promoted to lockman. In addition to other duties, the lockman must maintain records, such as the time of approach of a towboat, if the lockage was on time, if there were any accidents, and keep track of personnel.

(See page seven)
L/D operator
(From page six)

The Corps requires lock employees to have CPR training, multimedia first aid, defensive driving training, a boat handling license and a crane operator's license.

The procedure for locking a boat goes like this according to Jean:
"A towboat coming upriver calls on the radio (the lock has three different kinds of radio communication) and asks to lock up. The signal lights are turned on. Green indicates go, or come ahead, the lock is yours; amber means we are preparing the lock for you, stay away from the intake or discharge area; and red means stop, stay away, the lock is in use.

"The lower lock gates then open and the towboat comes into the lock chamber, which is 68 feet wide and 200 feet long. The barges are brought in and deckhands tie off onto mooring bits, which are 700 lb. cylinders of concrete reinforced with steel.

"When all barges are in place, the towboat takes its place beside the barges and the lock chamber is filled. Small boats can be placed in the lock with the barges as long as the captain of the towboat agrees and the barges are carrying no hazardous cargo. Federal regulations prohibit small boats from being locked with cargo such as diesel fuel, kerosene, petroleum or asphalt.

"During the lockage, the lock workers and towboat crew try to keep the barges from doing any damage to the lock walls. There is only a two-foot width of water between the barges and the lock walls.

"The lock gate is opened and the chamber is allowed to fill to the level of the pool. At that level, a "tainter" gate is lowered. The lock operator gives a blast on the air horn, indicating that the lock is ready for the barges to depart. The towboat, and any other boat equipped with a horn, must honk back in answer.

"Cables weighing 160 to 200 lbs. again secure the barges to the towboat and the tow pushes the barges across the pool, which covers an area of about three acres. The lower lock phones the upper lock, using either landline telephone or radio, to tell them of the towboat's approach. The entire procedure is repeated at the upper lock, although the water level there is raised 50 feet."

Lost tickets costs you time & money
by Scott Voss, AS-G

The Office of Administrative Services noted a steady upward trend in the number of lost GIN/carrier ticket claims made by employees traveling on business. This may be costing you money and time.

Lost carrier tickets are replaced out of the traveler's own pocketbook. The Corps will not be able to reimburse the traveler for four to five months.

To reduce or to eliminate the amount of red tape and inconvenience you as a traveler may experience, several steps should be followed:

* Safeguard your travel documents. Store/carry in a safe place. Never leave them unattended. Protect them as you would your money and personal property.

* When you obtain your carrier ticket, verify that the ticket folder contains a coupon for each segment of your itinerary before accepting it. Check again at each boarding gate to assure the carrier agent only withdrew the proper coupon.

Students study nature at dam
by Thomas Novak, Lake Ashtabula & Baldhill Dam

A series of five Eco-Expoz workshops were held at the Lake Ashtabula and Baldhill Dam recreation area in late September and early October. A total of 112 sixth graders from several Valley City, N.D., schools participated in the Expoz.

The one day-long workshops were developed and presented by park rangers Jerry Lee, Bruce Ostlie, and me.

The activities included leaf-tree and poison ivy identification exercises, discussions on the different species of fish and other organisms found in the lake, examination of the new aquarium in the recreation area, and presentation of a film entitled "The Way of a Trout."

At the end of the workshops, each student received an Eco-Expoz certificate of participation, patch, and booklet.

Extracted from "Thisweek," Oct. 27, 1980; Farmington, Minn.
New policy goes into effect

A new policy has been established concerning usage of the two 7000 and the 3600 Xerox office copiers.

All three machines will be available daily for usage at 7 a.m. and will be turned off at 4:30 p.m.

If a copier is required after 4:30 p.m. or on weekends, the 7000 copier in Room 1416A will be available. Arrangements must be made in advance and keys obtained from the Reprographics Branch in Room 1321A. The requestor will be responsible for turning off the copier, turning off lights and locking the door before leaving the room.

For security reasons, the copier in Room 1321A will no longer be available for usage after 4:30 p.m. or on weekends.

1980 fund drive yields are high

By Lynn Cuyler, EM

The Combined Federal Campaign annual fund drive, held Oct. 6-23, resulted in a total of $12,525.50. The amount of contributions were up $39.50 from last year's campaign in the St. Paul District, Twin Cities area.

Of the 222 persons who contributed to the campaign, 134 chose to use their payroll deduction option. All of the contributions were given to the United Way Campaign unless designated otherwise.

United Way of St. Paul expresses its appreciation to all employees who participated in the fund drive. Employees at field sites are encouraged to participate in the local United Way campaigns in nearby communities.
Student appreciates opportunity

The following letter was written by Robert Pineda, a high school student who was employed by the St. Paul District through a summer aide program:

"I can't tell you how much I appreciated the time and effort (the Corps) devoted to me. This is an excellent program you have for high school students and it should never be dropped.

I have gained and absorbed much this summer through my experience with other engineers and getting exposure to a field that I want to make a career of. I shall never forget this job; I will look back on it as rewarding, interesting, and challenging.

I also made many friends while working at my job. Thanks for everything."

Annual golf tourney coming up

by Ed McNally, ED-ER

About this time very year, a group of die-hard, St. Paul District golfers gather to compete for the coveted Freeze-Your-Buns Golf Tourney Trophy.

The golf tourney has been designed and refined over the years to test selected duffer skills. The usual skills are tested (e.g., longest drive, fewest strokes, closest to the pin, fewest putts) as well as some unusual skills (e.g., fewest strokes using only a nine iron on a par 5 hole, consumption of modest quantities of alcoholic/anti-freeze beverages, and attendance at the post-tourney get-together).

If you think you might be interested in participating in this year's event, call me at 725-7574 as soon as possible.

HAROLD HEULE, MASTER OF DREDGE WILLIAM A. THOMPSON, retired from the Corps on June 27, 1980. He was with the Corps since June 1967 and now resides in Winona, Minn. Harold (right) and his wife, Erna (left), wrote, "Thanks again to the entire office crew for your cooperation, advice and assistance during my time on the Dredge Thompson. I enjoyed my last three years on the dredge because no matter what problems or challenges that arose, I knew I could depend on you people and the best crew anywhere to work with on the dredge. Thank you for inviting my wife to the retirement presentation and luncheon because without her I would have never have had a successful career on the river." Before becoming the master of Dredge Thompson in 1977, Harold began as a pilot on the dredge in 1967 and received several Letters of Commendation from the St. Paul District. (Photo courtesy of Sharon Pffifer, CO-M)
Federal Women's Program news
by Denise Blackwell, CO-RF

Congratulations go to Mary Jane Trcka, ED-PB, and Cora Churchill, CO-RF, for being selected recently in two Upward Mobility positions. Mary Jane was selected as an accounting technician, GS 3/4/5 in the Controller Office, Civil Works Section. Cora was selected as an editorial assistant, GS 4/5 in the Environmental Resources Branch with the goal of being promoted to a writer/editor, GS 5/7/9. Good luck go to you both.

The November YWCA Continental Breakfast will be held on Nov. 26. The topic will be "Female Psychology: A Way to Understanding Women's Roles/Scripts" as perceived by Jessica Bailey, a faculty member of Metropolitan State University. The breakfast will be held at the St. Paul Downtown YWCA at 7:30 a.m. Breakfast per person is $3 and advance registration is required. For more information or to register, call 222-3741.

Dr. Morris Massey will present "The People Puzzle" on Nov. 15, from 9 a.m. to 3:30 p.m., in Room 100 at Smith Hall, University of Minnesota. The presentation is sponsored by the Twin Cities Chapter of Federally Employed Women (FEW) in cooperation with Continuing Education for Women, University of Minnesota Extension. Reservations and a $20 fee are required by Nov. 7. Send your reservation and check (made payable to FEW) to Dorothy Easton (FEW), P.O. Box 63, Mpls., MN 55470.

Here comes the holiday party!
by Henrik Strandskov, CO-RF

The holiday season is almost upon us and so is the St. Paul District Holiday Party. The Holiday Party Committee has been busy as the Corps beaver preparing for the exciting event.

The party will be held in the afternoon of Dec. 19 at the West St. Paul National Guard Armory. All district employees, retirees, and their guests are invited to attend the gala festivities. The District Engineer has authorized four hours of administrative leave for all employees attending the party.

Party-goers can look forward to a program of lively entertainment, a presentation of awards to outstanding personnel, a complete baked chicken dinner, lots of prizes, and a chance to celebrate the holidays with old friends in the Corps family. Beer will be sold; arrangements are being made for those who bring other beverages.

The committee is especially pleased with their selection of a location for the party. The West St. Paul Armory is conveniently located south of downtown at 1346 So. Robert St.; there's plenty of room for dining and socializing. The committee is also happy to announce that the caterer of the meal will be the same as the one who did such a good job at last summer's Corps picnic.

The Employees Benefit Fund (EBF) has been working closely with the committee in planning the party. A new feature of this year's party will be providing taxi cab service for those who may not be able to make their way home safely. EBF will sponsor this service.

Ticket for the party are only $5.75. District Office employees will be able to buy their tickets at work. Field personnel and retirees can buy tickets by sending in the coupon located on the back page of this newspaper. Any questions regarding tickets can be addressed to Joel Rogers, CO-CT, at 725-5991.

Student aide receives award
by Sharon Brown, EE

Student aide Theresa Charles, DC-F, received the Youth Award from the National Association For the Advancement of Colored People (NAACP) in mid-September.

The Youth Award, given annually by NAACP, goes to an outstanding St. Paul student who best exemplifies leadership, academic achievement and serves as a role model for other youth.

55 MPH WE CAN LIVE WITH IT
The St. Paul District Technical Library has a number of publications missing from its collection and requests your assistance in locating them.

If you have any of the following publications, please return them to Room 1120 or call 725-5921:


American civil engineering practice, Robert Abbet, ed. (TA 145 .A42)

The art of print making: a comprehensive guide to graphic techniques, by Erich Rhein. (NE 850 .R513 1976)

Bibliography of rivers and harbors and related fields in hydraulic engineering, by Robert Rowe. (Z 5853 .H5R6)

Building systems cost guide. (TH 435 .B848)


Concepts of ecology, by Edward Kormondy. (QH 541 .K59)


Disinfection—water quality and wastewater, J. Donald Johnson, ed. (TD 747 .D5)

Graphic standards of solar energy, by Spruille Braden III. (TH 7413 .B7 1977)

Ground water hydrology, by David Keith. (GB 1003 .T56 1959)


The mammals of North America, by Eugene Raymond. (QL 715 .H15 1959)

Man's role in changing the face of the earth. (G 56 .I63 1955 v.1)

The Minnesota: forgotten river, by Evan Jones. (F 612 .M4J6)

Modeling hydrologic processes: proceedings of the Fort Collins third international hydrology symposium...Hubert J. Morel-Geertoux, ed. (GB 656.2 .M33157)

Municipal and rural sanitation, by Ehlers and Steel. (RA 425 .E5 1965)


1001 questions & answers to help you prepare for the CDP exam, by Kenniston Lord. (QA 76.28 .I67 1977)

The physical geography of Wisconsin, by Lawrence Martin. (GB 126 .W6M3 1965)


Resources and man; a study and recommendations. (HC 68 .N36)

The St. Croix: midwest border river, by James Dunn. (F 612 .S2 D78)

Use of temperature surveys at a depth of 1 meter in geothermal exploration in Nevada, by F.C. Olmsted. (TJ 280.7 .O45 1977)

Wood technology in the design of structures, by Robert J. Hoyle, Jr. (TA 666 .H66 1973)
LEONARD GLOEB, DO, WON A SPEECH CONTEST sponsored by the Heritage Toastmasters International Club in the Area 9 Evaluation Contest, in late September. Leonard used communication skills and techniques he developed through active participation in the club.

(Photo by John Blackstone, ED-GH)

Where the smart money grows

It makes good sense to take stock in America. In fact, there are three good, sensible reasons why it’s wise to join the Payroll Savings Plan.

1. You save money with ease. Just sign up once and the money is automatically set aside from each paycheck.

2. The government replaces any Bond lost, destroyed or stolen. Nothing’s safer than Savings Bonds.

3. The third reason is really hundreds of reasons. Bad reasons, like a medical emergency. Good reasons, like that trip you’ve always wanted to take. And smart reasons, like a college education.

FEELING HAPPY AND PROUD was five-year old Molli, daughter of Judy Heutmaker, EP-E, as she became a U.S. citizen in a naturalization ceremony in mid-July 1980 with U.S. District Court Judge Edward Devitt.

(Photo courtesy of Judy Heutmaker)
Growing & learning at the same time
by John Blackstone, ED-GH

Do you remember last spring when the frost was vanishing? About that time, I was thinking about planting lots of tomatoes. However, when my garden was planted, almost everything else but tomatoes began to grow in the same spot.

It seems to be that way in life. Standing in a forest this past summer, I became aware of the variety of plants growing. The vast assortment of sizes, shapes and colors has led me to believe that nature has a way of creating strength out of diversity.

This is also true with Heritage Toastmasters. A diverse group of individuals can make an interesting group. Each individual is an expert at what they do and who they are. You could bring things that no one else has or does to Toastmasters. By joining Toastmasters, each member gains experience and knowledge through active participation in the group.

As a Toastmaster, I’ve become a trained expert in listening. I’m interested in what you say and how you say things.

You are invited to come to Toastmasters meetings and experience new challenges. Toastmasters meet each Thursday at noon, on the sixth floor of the St. Paul Downtown Post Office building, in the PEDC rooms.

Driving tips suggested for use
by Robert Mike, CO-A

The following driving tips are suggested to help you think and drive with fuel economy in mind:

* Observe the speed limit; however, traffic, weather and road conditions may require a slower speed for safety and fuel economy.
* Extend your vision 10 to 12 seconds ahead on the road; anticipate stops as far ahead as possible.
* Keep windows closed at highway speed; use internal venting.
* Respond to wind forces by driving more slowly into the wind and then letting it help you when driving with the wind.
* Take advantage of rolling resistance to help slow down as opposed to heavy braking; this decleration technique is one of the best for fuel conservation.
* Shut off all power consuming accessories before turning off the ignition so you can minimize engine load the next time you start up.
* Revving the engine just before shutting off the ignition cost extra fuel and may cause engine damage; 95% of engine wear comes from starting your vehicle.
* Avoid idling for more than one minute; excess idling wastes fuel.
* Avoid unnecessary steering wheel movement; this causes fuel consuming drag.
* Accelerate slowly on gravel or wet roads, avoid jack rabbit starts, unnecessary braking, and maintain a steady speed.
* Consolidate several short trips into one, plan your route to avoid traffic congestion and use the telephone or the mail whenever possible.

HERITAGE TOASTMASTERS' NEWEST MEMBER,
Gordon Heitzman, ED-GH, received the Speaker of the Week Trophy from Heritage Club president Fred Kelley, ED-PB, for his first Toastmasters speech.

(Photoby John Blackstone, ED-GH)
By Gene Elston

The Upper Mississippi River which officially begins at Cairo, Ill., at the confluence of the Ohio and Mississippi Rivers, ends insofar as navigation is concerned, at the Soo Line railroad bridge and the Camden bridge in North Minneapolis. This is a point 857.6 miles north of Cairo, Ill.

Through the Upper and Lower St. Anthony Falls Locks and Dams in downtown Minneapolis pass such vital cargos as cement, asphalt, steel, all the salt that is used in the city of Minneapolis to aid in snow removal and certain types of coal, just to name a few.

Downbound tows are loaded with chemicals, salad oil and salad dressing, fertilizer, scrap iron, coal, and grain.

Tow boats push their barges upbound and downbound through the Upper and Lower St. Anthony Falls Locks and Dams normally from about March 15 until Dec. 15 each year. This year however, because of major repair or restoration work being done at Lock and Dam 1, traffic will stop on Nov. 24 and not resume until May 1, 1981.

I talked to Robert Stahl, Lockmaster for both the Upper and Lower St. Anthony Locks and I asked him what effect the replacing of the swing bridge at Hastings, Minn., with a new lift bridge had on the activity through these last two locks in the system. "We were not near as busy as normal with upbound loaded barges," Stahl said. The new railroad bridge at Hastings has been a bottleneck for towboats for the last two weeks with tow backed up both upbound and downbound along with the passenger steamer, the Delta Queen.

Stahl pointed out that the two locks which he administers are capable of handling two barges plus their tow boat at one time although last week, they had one tow which included three loaded barges. In this case, the tow boat pushed two of the barges into the lock where they were tied to floating bits and once lowered to the level below the lock, the gates were opened and the two powerless barges were pulled out of the chamber via a power cable to a point where the gates could be closed and the chamber refilled for the remaining barge and the tow boat.

If you were in the wheel house of one of the tow boats pushing barges upstream from the Upper St. Anthony Lock and particularly if this happened to be the first time you had made the trip, you would be chewing antacid tablets like they were candy. Tows must make turns almost constantly at a gradual 45 degree angle first to the starboard or right side and then to the port or left side because of the bridges and the curving of the river from the point above the lock until the tow clears the railroad bridge above Hennepin Avenue bridge. It is problems and challenges such as this that give pilots ulcers.

Once a tow reaches mile marker 857.6 there is no further travel upstream because it is at this point that the nine foot channel stops. The maintenance of the nine foot channel is the responsibility of the U.S. Corps of Engineers and the placing of the buoys and navigation aids is the responsibility of the U.S. Coast Guard.

We've come a long way since the Lower St. Anthony Falls Lock and Dam was completed in 1958 and the Upper Lock and Dam in 1963. A lot of cargo has passed through these locks along with a lot of water over the dams.


Water reports listed

Planners, researchers, and others needing detailed information on area-wide water quality planning can now get it through a computerized bibliography developed by the Great Lakes Basin Commission.

The bibliography includes almost every water quality management planning report developed in the Great Lakes Basin--about 750 in all. To gain access to the bibliography, contact Great Lakes Information, P.O. Box 999, Ann Arbor, Mich. 48106, (313) 668-2330. Reports can be retrieved by state, lake, river basin, agency, or subject.

I can’t write because...

by Terry Bacon

___ My phone is ringing...again

___ The clanking, whizzling, and banging of typewriters and copy machines
make it impossible to concentrate

___ Everyone in the building feels compelled to stop at my desk at least a
dozens times a day to see how my report is coming

___ All of the above—and then some!

As if writing weren’t difficult enough by itself, we are often asked to do it in an
environment resembling a panic at a three-ring circus.
Writing is thinking. That fact alone makes your writing environment an important
part of your ability to write well. The more distracted you become, the less able you are
to write.

Short of magic, there are no easy solutions to a bad writing environment.
One chemist I know wears earphones whenever he’s writing. Another writer uses chain-
saw earplugs. And I met one man who writes on an unused stairwell; it’s the only place
in the building where he can work undisturbed.

Some people take work home. Some arrive for work early or stay late. Others search
for vacant offices or leave work and go to a library. And some people have told me that
they spend long hours in the john.

Such desperate measures are a clear signal to management that the writers cannot work
productively in their existing environments. So the real solution lies in managers becoming
more aware of their writers’ needs.

Managers should plan for writing activities, rearranging offices, if necessary, to
move noisy machinery away from the people who spend 30 to 40 percent of their working time
writing.

If you have the misfortune to work in an office that could be mistaken for an aerial
circus, lobby for change. The result could be an office where you can actually get some
work done. But if your voice is lost in the clamor, that ought to sell managers some-
thing, too.

Extracted from "Writing in the World of Work," Spring 1980; Shipley Associates; Bountiful,
Utah.

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