

Education programs get boost from state

FFL programs receive grants totalling \$198,724

The Friends of Fermilab were recently notified by Illinois State Superintendent of Schools Robert Leininger that three of their proposed programs are to be recipients of Scientific Literacy Grants totalling \$198,724.

These grants were awarded on the basis of proposals submitted to the Illinois State Board of Education's Center on Scientific Literacy and are to be used for the implementation and operation of the following three projects:

1) To introduce Teaching Integrated Mathematics and Science (TIMS) in schools in participating districts in Kane and DuPage Counties through the 1991 TIMS-II Summer Institute. The Summer Institute and follow-up activities will prepare 39 elementary and junior high school teachers to become lead teachers, provide assistance in integrating TIMS into the regular school curriculum and present new TIMS activities. (This project was proposed in partnership with the Friends of Fermilab, Fermilab, University of Illinois at Chicago and Fermilab region school districts.)

2) To develop a science unit titled *Particles and Prairies: The Fermilab Prairie Savannah* which will

make the Fermilab National Environmental Research Park accessible to junior high school classes. The unit is planned to include a research experience for students at Fermilab, teaching activities for the classroom, an extension of the program into the students' community, and workshops for the participating teachers. (This project was proposed in partnership with the Friends of Fermilab, Fermilab, and schools in the DuPage-Kane Educational Service Center #4.)

3) To conduct a Summer Institute for 60 Chicago high school science and mathematics teachers in 1991, 1992 and 1993. This institute is in response to the need in Chicago to revitalize the skills of current science and mathematics teachers, to maintain interest in the teaching of science and mathematics as a career, and to provide improved classes to encourage more students from groups underrepresented in science, mathematics and technology to study science and mathematics. (This project was proposed in partnership with Friends of Fermilab, Fermilab, Chicago State University and the Chicago Public Schools.)

The state of Illinois has provided the funding for the Scientific Literacy Grant Program since 1989. The two major focuses of the grant program are to provide funds for innovative science and mathematics programs and projects that provide experiences for students outside of the classroom environment; and to assist

school districts and other not-for-profit organizations in providing staff development programs and activities.

"It is unusual and commendable for a state to provide such a sizeable amount of funding for science and mathematics education," said Marge Bardeen, Vice President of Friends of Fermilab. "The Scientific Literacy contribution to Friends of Fermilab is important and significant because it will allow us to expand our current program offerings in response to the overwhelming requests we continue to receive."

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The Employee Assistance Program

Alcohol—The Legal Drug

We're all aware that society has waged a war on drugs, such as marijuana, heroin, cocaine and PCP. However, it is apparent that we have failed to emphasize the effects that legal drugs have on society and individuals, especially the legal drug, alcohol. Alcohol is truly one of society's most destructive drugs in terms of addiction and related health problems. Alcohol abuse and dependence problems affect about 10 percent of American adults. Alcohol is ranked as one of the top three causes of death in the United States, outranked only by cancer and heart disease. It is estimated that a minimum of 3 out of 100 deaths in the United States can be attributed to the use and abuse of alcohol.

Two distinct forms of problematic drinking, alcohol abuse and alcohol dependence, have been identified

by researchers. Alcohol abuse involves persistent patterns of heavy alcohol intake whereby the individual's health may be at risk and/or social functioning is impaired. Alcohol dependence is differentiated from alcohol abuse on the basis of such manifestations as craving, tolerance, and physical dependence that result in one's inability to exercise restraint over drinking. Drinking that causes a problem, whether social or medical, mild or severe, signals the need for prevention and treatment.

For some nondependent alcohol abusers, interventions aimed at modifying harmful drinking patterns are appropriate. Early identification of such individuals and intervention methods involving advice, brief counseling, and training have been successful. For the alcohol dependent per-

son, the appropriate treatment goal is abstinence. A range of treatment options, including pharmacological interventions, psychotherapy and counseling, Alcoholics Anonymous, and a variety of behavioral training programs are used. Alcohol abuse and alcohol dependence are very complex processes. There are genetic, psychological and social factors involved. Alcohol abuse and dependence affect not only the drinker but those he/she comes in contact with including family, friends and co-workers.

Any employee whose life is being affected by alcohol is encouraged to contact the Employee Assistance Office at x3591 for confidential, professional assistance.

—*Eleanor Thomas-Grumbach*

Trudy's Corner **NALREC news**

The 50's-60's party slated for Friday, October 12 was cancelled due to budget uncertainties. We hope to reschedule as soon as possible.

Our schedule for the rest of the year is as follows:

Children's Halloween
October 27- Sherry Thill, Chair

Turkey Party
November 16- Dominick Carullo, Chair

Children's Christmas Party
December 9 - John Satti, Chair

Formal Christmas Dance -
December 15- Trudy Kramer, Chair

Employee Christmas Party
December 21- Nalrec Board Chairs

We hope you will plan your social calendars around our parties. The socials are planned in advance so that we can see as many of you as possible at these functions. Mark your calendar and plan to attend.

Please take advantage of the terrific jackets, caps, mugs, vases, frisbees and other sales at the front

desk in the Atrium. We are presently out of our T-shirts but we have re-ordered and they will be in stock again in a few weeks.

Make Today a Great Day !

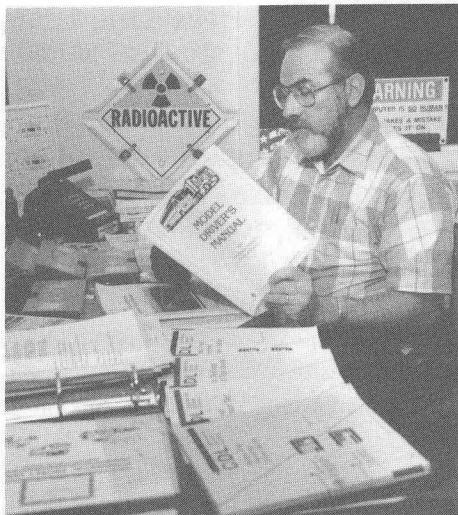
—*Trudy Kramer*

Federal law to impact on Lab commercial drivers

Business Services Section prepares resource library to assist drivers

Fermilab professional drivers are preparing to take a much more stringent requalification examination as Illinois moves to meet new Federally mandated requirements for the licensing of commercial drivers.

In anticipation of the preparation necessary on the part of the drivers to take this new examination, the Business Services Section has created a resource library of home study materials. These materials, which support standards set by the Illinois Safety Council, include audio cassettes, videotapes and study guides.



Gordon Allen reviews study materials available to drivers

Dave Carlson (BS/Support Services) credits Gordon Allen (BS/SS/Receiving and Distribution) for his work on researching and collecting the materials for the resource library. "Providing these materials is an important part of our quality assurance program which calls for facilitating training and professional certification," stated Carlson. Dave also noted that preparation for the test is necessary.

"The test is much more involved than just knowing the rules of the road. Drivers are required to have a working knowledge of a variety of inspection, emergency and safety issues. "According to Gordon Allen, the written exam can have between 40 to 150 questions depending upon the endorsements needed to qualify for a particular vehicle. Both Carlson and Allen think that the study resources available to the Lab drivers will be valuable as drivers prepare for the test.

The revised commercial driver's test and endorsement classifications are a result of a Federal law signed by President Ronald Reagan on October 26, 1986. Known as the Commercial Motor Vehicle Safety Act (CMVSA), the law was designed to improve transportation safety by requiring all drivers nationwide to meet federally regulated standards.

Statistics show that a high percentage of accidents involving commercial vehicles and automobiles result in fatalities. The fatal injuries are usually sustained by those travelling in the automobiles. It is hoped that the provisions set forth in the CMVSA, which provide for statewide testing conformity, stricter penalties for moving violations and a nationwide computer system for tracking driving records, will reduce the number of fatal accidents occurring on our nation's highways.

Fermilab employees 28 professional drivers of commercial vehicles. The CMVSA defines commercial vehicles as any vehicle with one or more of the following specifications: weighing over 26,000 lbs.; designed to transport 16 or more passengers; transporting hazardous materials; or

with a trailer rated over 10,000 lbs. According to the law, all CV drivers must obtain the new CV license by April 1, 1992. In order to obtain the new license, drivers must take a written examination and those with moving violations must take a driving test.



Wayne Smith, Support Services driver, has already requalified under the new Commercial Motor Vehicle Act. He used materials available at the Lab to prepare for the exam.

Wayne Smith (BS/SS/Distribution) has already taken the new examination and passed with flying colors. Wayne found the home study materials of value as he prepared for the test, particularly the videotapes relating to the transportation of hazardous waste. Gordon Allen predicts that the study materials will be well used as the rest of the Laboratory's professional drivers apply for their new CV operating license.

New from the Stockroom

Items now available from the stockroom

1075-0500 Valve, plug, 316 S.S., Viton O-ring, 3,000 psi, Nupro P/N SS-4P4T4, 1/4 in. female NPT. \$26.07.

1077-0900 Union, 304 stainless steel, Buttweld Viton O-ring type, 3,000 psi, Hart Ind. P/N 3535-3-V-304, Schedule 10, 1/2 in. x 1/2 in. nominal pipe size. \$43.20.

1077-0905 Union, 304 stainless steel, Buttweld Viton O-ring type, 3,000 psi, Hart Ind. P/N 3535-4-V-304, Schedule 10, 3/4 in. x 3/4 in. nominal pipe size. \$54.

1077-0910 Union, 304 stainless steel, Buttweld Viton O-ring type, 3,000 psi, Hart Ind. P/N 3535-5-V-304, Schedule 10, 1 in. x 1 in. nominal pipe size. \$75.60.

1077-0915 Union, 304 stainless steel, Buttweld Viton O-ring type, 3,000 psi, Hart Ind. P/N 3535-7-V-304, Schedule 10, 1 1/2 in. x 1 1/2 in. nominal pipe size. \$151.20.

1077-0920 Union, 304 stainless steel, Buttweld Viton O-ring type, 3,000 psi, Hart Ind. P/N 3535-8-V-304, Schedule 10, 2 in. x 2 in. nominal pipe size. \$188.

1079-0710 Elbow, Union, 90 deg., 316L S. S., automatic butt weld type, Cajon P/N 316L-8-ATW-9, 1/2 in. tube. \$23.

1079-0715 Tee, Union, 316L S. S., automatic butt weld type, Cajon P/N 316L-4-ATW-3, 1/4 in. tube. \$21.08.

1079-0717 Tee, Union, 316L S. S., automatic butt weld type, Cajon P/N 316L-8-ATW-3, 1/2 in. tube. \$29.75.

1079-0818 Gland, 316L S. S., VCO automatic tube butt weld, Cajon P/N 316L-4-VCO-3A, 1/4 in. tube. \$5.88.

1079-0820 Gland, Blind VCO, 316 S. S., Cajon P/N SS-4-VCO-3-BL, 1/4 in. VCO. \$2.16.

1079-0836 Coupling body, 316L S. S., VCO automatic tube butt weld, O-ring seal, Cajon P/N SS-4-VCO-1A, 1/4 in. VCO to 1/4 in. auto. butt weld. \$8.54.

1079-0838 Blind VCO body, 316 S. S., O-ring seal, Cajon P/N 316L-4-VCO-1-BL, 1/4 in. VCO. \$4.98.

1079-0865 Connector Body, Bulkhead union VCO to Swagelok, 316 S.S., O-Ring seal, Cajon P/N SS-4-VCO-A1-400, 1/4 in. VCO to 1/4 in. Swagelok. \$12.37.

1079-0872 Connector Body, Bulkhead union VCO, 316 S.S., O-ring seal, Cajon P/N SS-4-VCO-61, 1/4 in. VCO to 1/4 in. VCO. \$17.71.

1079-0874 Tee, Union, VCO, 316 S.S., O-ring seal, Cajon P/N SS-4-VCO-T, 1/4 in. VCO. \$18.33.

1079-0895 Connector Body, straight, Male NPT to female VCO, 316 S.S., Cajon P/N SS-4-WVCO-1-4, 1/4 in. male NPT to 1/4 in. female VCO. \$14.28.

1246-2475 Blade, replacement, for X-Acto knives no. 3201 and 3203, X-Acto blade No. 17, 5 blades per pkg. \$0.71.

1246-5810 Wrench set, balldriver, for Allen type socket head screws, w/plastic handles, Bondhus P/N BSX13, 13 drivers per set, .050 thru 3/8 in. \$19.86.

1307-0575 manual, computer operations, UNIX for VMS users, DEC P/N EY-C177E-DP. \$28.95.

1315-0337 Paper, electrographic, for Versatec V80 printer/plotters, Versatec P/N 4011-R, 11 in. wide x 500 ft. long, 2 ro. per carton. \$50.

1320-1450 Paper, plotter, vellum, Sharpline 325S or equal, C size, 17 in. x 22 in., 100 sheets per pkg. \$62.27.

1320-1455 Paper, Plotter, vellum, Sharpline 325S or equal, oversize C, 18 in. x 24 in., 100 sheets per pkg. \$65.

1780-0575 Tape Cartridge, EDP, for Sun and other workstations, 3M P/N DC6150, 1/4 in. x 600 ft. long. \$20.

— Frank Cesarano

From Harper's Index ...

Price of CyberVac, a self-navigating robotic vacuum cleaner, from Cyberworks of Ontario, Canada: **\$10,500**

Number of veterinary operations assisted this year by Robodoc, a surgical robot: **6**

The Quality Corner is for experimental users too!

You convey no greater honor than to actually hear what someone has to say.

The theme of this year's National Quality Month, *The Human Side of Quality: People, Pride, Performance*, is designed to focus our attention on *both* people and performance. As stated in the Fermilab Institutional Plan, "Fermilab's mission is to provide the resources necessary for qualified researchers to conduct frontier basic research in the field of high-energy physics and related disciplines." When viewed through the eyes of quality assurance, the Laboratory's mission is more analogous to a service industry, like a restaurant, than to industrial or manufacturing environments. But rather than food, the Laboratory serves-up particle beams and the associated systems needed to run experiments, accumulate and analyze data results, and all of the necessary systems to support the network of site-wide activities. The bottom-line of quality at Fermilab should be a commitment to providing the best service we can for the collaborations that come here to do physics.

For experimental users, the end or start-up of a fixed-target or collider run is a good time to reflect upon the quality of service they receive at the Laboratory. It is also a good time for users to suggest ways for the Laboratory to improve such services. The Quality Corner is a mechanism through which both employees and users can make suggestions on how to improve the Laboratory's performance and enhance the quality, efficiency reliability and effectiveness of all Laboratory services.

Suggestions that are sent to the QA/VE Office are transmitted to the responsible Division/Section Head who studies the feasibility of the suggestion and the cost/benefit of implementing it. They subsequently send written responses back to the QA/VE Office and the suggestions and responses are passed on to the Editor of *FermiNews* for publication in the Quality Corner. Most of the suggestions received to-date have been aimed

at improving activities not directly related to the physics program. Some of these ideas included in these suggestions have already been implemented at the Laboratory. National Quality Month is a good time to remind *FermiNews* readers that *the Quality Corner is for experimental users too!* If you have suggestions on how the Laboratory can better serve the needs of users either during the physics run or in preparation for a physics run, we would like to hear from you. Send your suggestions to MS 200 or BITNET Bodnarczuk@FNAL.

— Mark Bodnarczuk

October
is
National Quality
Month

NALWO news

On Friday, October 26 at 5:30 p.m., NALWO will be hosting a Potluck Dinner in the Village Barn. All Fermilab employees, users and their families are invited to attend.

Look forward to wonderful food and stimulating conversation. Bring a main dish, salad or vegetable which will serve 8 to 12 persons. Dessert and beverages will be supplied. For those unable to bring a dish to pass, there is a \$3 per person charge. Baby-sitting will be available. For more information call Brenda at x3440.

In Memoriam

On September 2, 1990 our husband and father passed away unexpectedly while at his home. His death has left a tremendous emptiness in our lives that will take forever to heal. In these times, however, we have been very encouraged by the thoughtfulness, prayers and gifts we have received from the Fermilab community. Those who knew him best realize that Fermilab in general, and CDF particularly, were very important parts of his life.

We wish to extend a heartfelt thanks to all who have supported us in these difficult times.

The John W. Norris Family,
Janice, Barry, Cara and Sherry

The Art Series presents

Chester String Quartet and Prism Quartet (saxophone & midi ensemble)
Saturday, November 10, 1990 at 8:00 p.m.

Two young, award-winning quartets, of remarkable difference in nature, are taking the nation by storm! The **Chester String Quartet** and the **Prism Quartet** join forces to perform Michael Sahl's *Storms* for string quartet and saxophone quartet, an intriguing work "firmly rooted in conventional tonality and harmony." In addition, each quartet will perform standard repertoire at the concert to be presented in Fermilab's Ramsey Auditorium at 8:00 p.m. on **Saturday, November 10**. This is the second concert of Fermilab's Chamber Music Series.

Prism Quartet members Reginald Borik, Matthew Levy, Timothy Miller and Michael Whitcombe have received the highest praise for their creative programming as well as their mastery of both traditional saxophones and electronic wind instruments. These Fischhoff National Chamber Music Competition prize-winners open their portion of the program with music of J.S. Bach, and move quickly through

the centuries to modern-day compositions specifically written for saxophones and the unusual Yamaha WX₁₁ Wind Controllers.

They are "one of the best and brightest of the country's young string quartets," says *The Boston Globe* of the Chester String Quartet. Fritz Gearhart, Kathryn Votapek, Ronald Gorevic and Thomas Rosenberg are

Quartet-in-Residence and full-time faculty members of Indiana University at South Bend. They are also receiving increasing recognition from the international music-loving community, with performance invitations form around the world. In addition to performing *Storms* with the Prism Quartet, the Chester String Quartet performs music of Samuel Barber and Quincy Porter at Fermilab.

This evening of exciting, challenging and moving music, performed by two of our country's fine young music ensembles, awaits music lovers for a \$9 admission. Tickets are not refundable. For further information or phone reservations, call 708-840-ARTS weekdays between 10:00 a.m. and 12:00 noon or 1:00 and 4:00 p.m. Phone reservations are held for five working days but will be released for sale if not paid for within that time. All telephone orders the five days immediately preceding a performance must be paid for by credit card.

—Tammy Kikta



Chester String Quartet (top) and The Prism Quartet (bottom)



Applause applause applause

I wish I had someone to talk to. There's a lot of things about growing up that I don't understand.— Mike age 11

There are many children in this area between the ages of 6 and 16 who are from disadvantaged, dysfunctional or single parent homes, who would like very much to share a friendship with someone older. **Peggy Whitson** (TS/Engineering) and **Jeff Ruffin** (AD/AS/RF) are helping to fill this need by volunteering their time to the Big Brothers/Big Sisters organization of Southern Kane and Kendall Counties. As volunteers in this program, Peggy and Jeff spend four or five hours a week with a child who needs a relationship with a caring adult.

Peggy and Jeff became involved in this program about three years ago, and although they do not know one another, many of their feelings and experiences have been common. Both were prompted by experiences in their own childhoods to join the program, and both hold the strong beliefs that time, caring and appropriate role models can and do make a real difference in the life of a child. They believe this so strongly, that they are willing to weekly rearrange their schedules and sacrifice their free time in order to make this difference.

"I began the program when my own daughter was getting older and there weren't as many demands on my time," said Peggy Whitson. "I have always enjoyed spending time with young children, so I decided to become a Big Sister." Peggy and her little sister were matched up after about a four month waiting period. Big Brothers/Big Sisters organizations lend a lot of support to the mentor and the child. Counselors carefully screen applicants to make sure they are right for the program and they work with the volunteers and children to evaluate the relationship and the goals.

When volunteering as a Big Brother /Big Sister, the organization asks for a one year commitment, but many stay in the program long past that time frame. "You form an attachment, a real caring for the child," explained Peggy. "Although my original commitment was actually only for six months, as long as things are working out for my little sister, I will probably stay until she is out of the program."

Jeff Ruffin echoes this sentiment. "Many of the children in this program have been disappointed by adults. When I first met my little brother, I overheard him telling his mother, 'If it doesn't work out with Jeff, then I don't want to be in the program.' I knew then that I was going to work hard at the relationship so that he would not be disappointed." Jeff is also committed to remaining a volunteer mentor until his little brother is sixteen and no longer in the program.

According to Jeff and Peggy, setting goals is an important part of the program. For Peggy, her goal is to serve as a role model and through example show her little sister that there is another side of life. She also hopes to encourage her little sister in her educational pursuits and lend guidance as she goes through the difficult teen years. Jeff's long range goal for his little brother is to help him to form values that will enable him to become a productive adult who can in turn give something back to society. "It is pretty much the same dream I have for my own children," said Jeff.

Both Jeff and Peggy have children of their own. Peggy has a daughter who is sixteen and Jeff has five children, four daughters and one son, ranging in age from 23 to 9. Both of their families are supportive of their involvement in the program. "My son enjoys spending time with my little brother and at times we do things as a

family," said Jeff. At other times though it is important for the Big Brother/Big Sister to spend time exclusively with the child they are working with. "It doesn't always have to be an outing," says Jeff, "but these children need individual time." That is when the support of one's family, especially if there are children at home, is important. Both Jeff and Peggy are pleased that their own children like their "little" and understand the need to give time individually to that child.

"I have enjoyed my involvement with my little sister and I would encourage others to become involved in the program. There is a long waiting list of children and just not enough mentors," said Peggy. There seems to particularly be a shortage of Big Brothers. "Most children in a single parent home are living with their mothers," says Jeff. "Often single mothers of sons use the program to provide their sons with a positive male role model."

"It isn't always easy," continues Jeff. "As the adult partner, you often have to work hard to keep the relationship going and to help the child over rough spots." Peggy confirms that at times the commitment gets difficult. "Sometimes you have to juggle your schedule, rearrange your time in order to spend time together." But to Peggy, the commitment has been worth it. "Setting aside the time does get hard," says Jeff. "I guess, I just look at it as doing a little more than I think I can do and hoping in the end that I did the best I could."

Any employee who is interested in becoming involved in the Big Brothers/Big Sisters organization as either a mentor or in other capacities, can obtain information from Dianne Engram (LS/EEO) WH15E x4633.

Our Environment —

Recycling literature available

According to Eric Keeley, Recycling Coordinator for DuPage County, "Recycling is a rapidly changing field and is becoming an increasingly more important method of waste disposal. Materials that are difficult or impossible to recycle today, may be commonly collected in the next couple years through curbside, drop-off and commercial recycling programs."

As recycling becomes more and more popular, the need to get the word out about how to properly prepare materials for collection programs is clear. DuPage County Department of Environmental Concern publishes a quarterly publication titled, "DuPage County Recycling Yellow Pages," which answers this and other questions regarding recycling.

Copies of this publication have been made available free of charge to Fermilab employees and may be picked up at the information table outside of the Public Information Office located at WH1W. Also available on the information table are three other brochures from the Department of Environmental Concern regarding land waste recycling, composting and hazardous waste disposal.

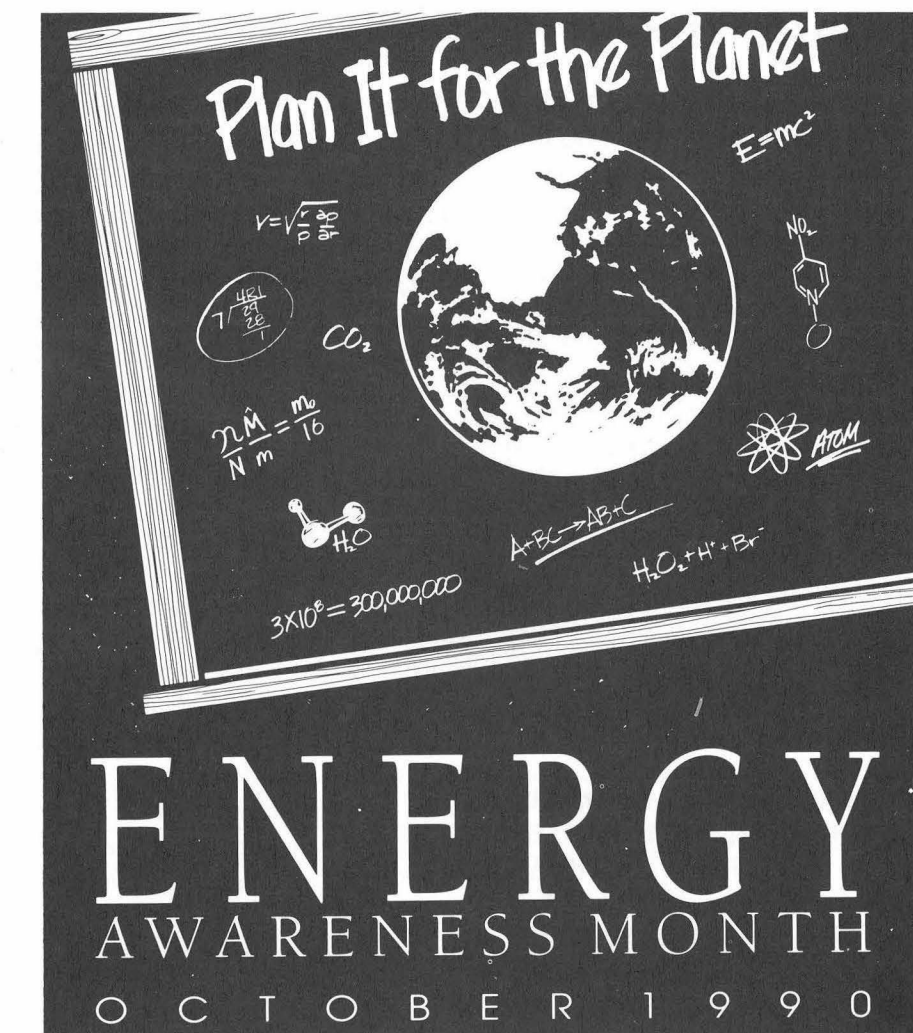
Cla\$\$ified ad\$ —

Miscellaneous:

4-year-old Male Cat, neutered, declawed and vaccinated, free to person who can provide him with a loving home. Call Diana at x 3654.

Motorized vehicles:

1968 Vintage Volkswagon Fastback, great cond., 73 Squareback engine, fast, reliable, 27 mi./gal., \$1,200 o.b.o., must sell! Call 513-1845 evenings



October is National Energy Awareness Month

1982 Fiat Spider 2000, black and tan, luggage rack, mag wheels, like new top, good tires, new clutch, new brakes, sharp car. \$3,200. Call Ed Dijak at 708-690-1145 after 5 p.m.

1983 Toyota Tercel, silver, good cond., good gas mileage, AM/FM cass., \$2,000 o.b.o. Call Dave at x4533 or 851-8763 after 5 p.m.

Real Estate:

2-Bdrm. House for Rent, St. Charles (close to Pottowatamie Park), big yard, fireplace, washer and dryer, \$705/mo., available Dec. 1. Call 513-1845 evenings.

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