

# Fermi news

## FERMI NATIONAL ACCELERATOR LABORATORY

### Lab receives accolades for ASME ceremony

Fermilab employees, DOE officials and members of the American Society of Mechanical Engineers were witness to another Fermilab milestone as the Tevatron's cryogenic cooling system was named an International Historic Mechanical Engineering Landmark by ASME September 27.

The cooling system, which brings super-cold liquid helium to the superconducting magnets, is a crucial component of the Tevatron. The landmark designation recognizes this significance and recognizes the decade of reliable operation as well as the innovative engineering involved in the initial design and fabrication of the system. Many innovations included in Fermilab's system have served as a model for similar systems around the world.

Fermilab was commended by ASME for its organization of the presentation ceremony marking the designation, the accompanying tours of the site to visiting members of ASME and various dignitaries, and the brochure detailing the cryogenic cooling system. Diane Kaylor, ASME manager of Special Projects, said in a letter "the ceremony was...extraordinary in several ways. The planning was a model worthy of emulation. Your generosity to your guests at the luncheon, on the tours and for the reception is appreciated. The quality that went into the program and the exhibit, in addition to the details of the ceremony, was superb."

The efforts of many people were required to create such a ceremony. **Rich Stanek** (RD), an ASME member, played a large role in organizing the presentation. He said this designation should instill a sense of pride in the Fermilab engineering community. The designation came "after a thorough review of the project by a highly qualified group of one's peers," said Rich. "The fact that this is only the 39th International Historic Mechanical Engineering Landmark since the start of the ASME program in 1971 should bear witness to the contributions that this project has made to mechanical engineering history."

Many other Fermilab employees contributed to the success of the event. Some of the key organizers were **Mary Cullen** of the Director's Office who organized many of the onsite activities, including the luncheon and reception; Public Information Office personnel **Barbara Lach, Brian Charles, Nancy Lanning** and



(r) *John Peoples and Cheri Langenfeld (DOE CH) accept the ASME designation plaque on behalf of Fermilab. Also pictured are (l) Bill Fowler and ASME members.*

**Cyndi Rathbun** for their many contributions including creating the dedication brochure and conducting tours; Visual Media Services staff **Fred Ullrich, Reider Hahn, Sheila Colson, Jim Schultz, Jim Szyplik** and **Jan Olsen**, who provided the photos for the Second Floor display and photographically covered the event; **Al Johnson** and **Cindy Arnold** of Duplicating Services who duplicated the photo display pamphlets; **Saundra Poces** (Directorate) and **Adrienne Kolb** (Directorate) who played a strong role in the photo and exhibit display efforts. They helped with selecting the photos and setting up the display; the drivers who chauffeured the luncheon/tour personnel; **Jay Theilacker** (AD) who organized the technical information for the photo and exhibit display and brochure; **Bill Fowler** (AD) who gave a talk on the history and significance of the Tevatron CCS both at the ceremony and at an ASME evening meeting; and **Jerry Makara, Mike Geynisman, Ron Walker** and **Rick Bossert**, all members of the AD/CHL group, who led tours of the Central Helium Liquefier.

The ASME History and Heritage Recognition Program, which began in September 1971, provides a public service by examining, noting, recording and acknowledging achievements of particular significance. An ASME International Mechanical Engineering Landmark represents a progressive step in the evolution of mechanical engineering and reflects a positive influence on society worldwide.

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# Murphy and Christian take helm of Research Facilities Department

**Roger Dixon**, head of the Research Division, has appointed **Thornton Murphy** as head of the Research Facilities Department and **David Christian** as associate head of the department.

The Research Facilities Department consists of five groups: the Experiments Group, which is made up entirely of physicists, most of whom serve as liaison physicists for fixed-target experiments; the KTeV Group, which includes the Fermilab physicists working on preparations for the KTeV experiment; the Silicon Detector Group, which provides space, equipment and personnel for the development, production and testing of silicon microstrip detectors; the Technical Support Group, which builds experimental apparatus, maintains the Ziptrack magnetic field mapper and supports detector development efforts, particularly relating to scintillating fibers; and the Particle Detector Group, which carries out R&D on state-of-the-art detectors and detector technologies.

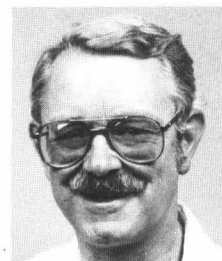
In his new role, Thornton has overall responsibility for the department and oversees its ES&H functions. He directly manages the activities of the Particle Detector Group, the Experiments Group and the Silicon Detector Group. Dave has responsibility for the department's budget and the Technical Support Group.

"The Research Facilities Department has

been in a state of continuing change over the past years as it has struggled to accommodate the evolving style of high-energy-physics research," said Roger Dixon. "Longer runs have meant longer times between runs. Colliders have brought giant detectors and collaborations into the field. One of Thornton's main challenges will be to redefine the role of the department so that it will continue to be useful to the researchers it supports."

Thornton came here in 1973 after nine years at the University of Michigan and Carnegie-Mellon University. At Fermilab, he has been head of the Proton Area Department, associate head of the Tevatron Systems Department, leader of the RD Beams Group, head of the RD Cryogenics Department and associate head of the DØ Department of Installation. "I've moved my office 14 times at Fermilab, and expect to keep moving until I die," said Thornton. He also works part time on many experiments—mostly at night and on weekends. His major experiment at this time is E853, for which he is the spokesperson. "Although this experiment was motivated by an application to SSC, it has potential uses here at Fermilab as another way to extract beam to test beams, and, even without practical application, it is interesting accelerator science," said Thornton.

Dave joined Fermilab as a postdoc in



Thornton Murphy



Dave Christian

1982 after receiving his Ph.D. from The Johns Hopkins University. He was a Wilson Fellow, and after joining the Fermilab staff, served as assistant head of the Research Division Electrical Engineering Department. In this position, Dave helped establish a group with the capability of designing custom integrated circuits. Dave's thesis experiment was a baryonium search done at SLAC using the LASS spectrometer. He collaborated on an experiment at Brookhaven that concentrated on the study of high-multiplicity exclusive final states produced in pp and pp interactions. As part of the same collaboration, he is now working on E690. This experiment, which took data during the 1990 Fixed-Target Run, will study the production of charmed particles in pp target diffractive dissociation.

Thornton and Dave replace **Greg Bock**, who previously served as department head and **Sam Childress** and **Carlos Hojvat**, who served as associate heads of the department.

## New leadership, new look and new direction for the Fermilab Cafeteria

The Fermilab Cafeteria opened its doors 20 years ago this month, and, like any twenty-year-old institution, it is ready for change.

"The layout and much of the cafeteria equipment is original," said **John Barry**, manager of Accommodations. Now, in conjunction with the Director's Office, the Accommodations Department is making plans to modernize the equipment and improve the traffic flow.

As an initial step in this renovation plan, two new condiment areas have been added, replacing the one, older service area. "The

new areas accommodate more people and help to alleviate congestion," said John.

Along with equipment, there are other changes on the horizon. "We are in the process of expanding the menu to include more "eat healthy"—low-calorie, low-cholesterol foods—and also more ethnic menu specials," said John.

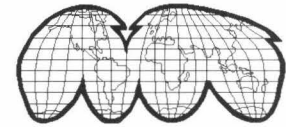
The cafeteria has over the last several years avoided the use of animal  
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On its opening day the cafeteria served 250 meals. Now it serves over 1,200 customers daily and over 1,500 during peak summer and spring seasons.

*special section. . .special section. . .special section. . .special section*

# F E S S . . . U P



## *The confessions of a section seeking world class*

**Work Request Center • Telephone x3434 • Fax x8769 • Mail Station 300**

### From the section office...

*Measurement*, another key ingredient of World Class.

The need to measure was probably responsible for the creation of numbers. Much of our vocabulary is made up of terms that convey measurement information: length, time, speed, volume, temperature, etc. FESS needs to establish specific and measurable goals. The numbers will make these goals quantifiable. The question is:

1. How valuable is performance measurement in performing our job?
2. With the data provided, can we predict trends?
3. What additional data do we need, and who can provide it?
4. What actions will we take when we detect unfavorable trends?

We are committed to the concept of "continuous improvement," therefore, we must establish today's baseline in order to track (measure) our progress. Our baseline should mimic our customers' requirements, and our goal should be to meet those requirements 100% of the time.



### On the drawing board...

Design for the office/tech space addition to IB2 is 90% complete. The KTeV Experimental Area (Decay Enclosure Experimental Hall and Counting House) design is progressing on schedule.

### Main Injector update...

Three concurrent contracts are on going:  
1. Construction of the underground enclosure at MI60 (adjacent to F0). 2. Construction of the MI60 Service Building (west of RF building). 3. Installation of construction road around entire Main Injector site.

### In progress...

Operations & Maintenance personnel are in the process of performing program maintenance checks and any necessary repairs on equipment throughout the site associated with freeze protection. This activity is very important and critical to the safeguard of buildings and processes. Please direct any work requests to Work Central. Your help is appreciated for both comfort and site protection.

### At your service...

The Operations & Maintenance Department responds to calls made to Work Central at x3434. After a call is received, a repair work order is created. The requester is offered the work order number for record. Sometimes, depending on the magnitude of the job, a request is made for a budget code. In either case, the work order number keeps track of any and all time and material costs involved, and this record is made available to DOE in various formats to meet the requirements of Order 4330.4A, the "Maintenance Order." The work order number also provides the requester with a tracking method to ascertain when the work will be addressed and/or completed.

### Better for you...

**DDC Energy Retrofit - a new project that will make your work area comfort zone better.**

Wilson Hall Residents - Mark November 1 on your calendars. Wilson Hall Direct Digital Controlled (DDC) Energy Retrofit project commences. Extensive modifications to the existing ventilation systems will occur. A few facts on the project: a) work will take six (6) months to complete; b) work will occur only on the east and west sides of the building (no cross-over work); c) work will start on the 15th floor and move down; d) work will be done between the hours of 5 p.m. and 2 a.m.

Two "contact" people have been designated from each floor, one on each side. Contact people will interact with the project contractor, Gengler Sheet Metal, who will inform by letter when the work will commence in a given area. Your floor contacts will then inform you. When work begins in your area you will be required to remove all objects from the top of your work space. Your work space, as well as all equipment, will be covered by the contractor for protection.

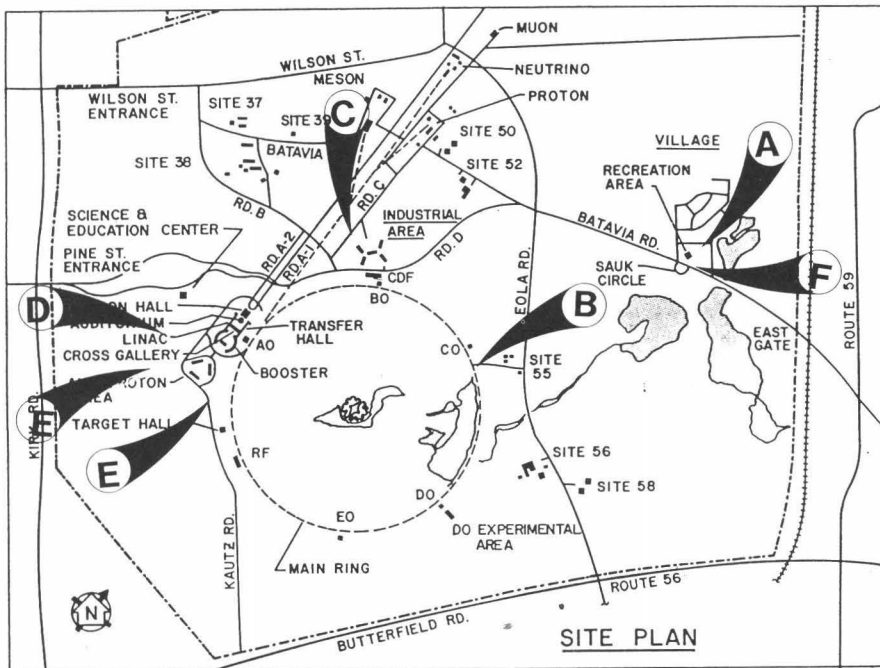
New thermostats will be installed at specific locations (bay areas) on your floor. You

Continued on page 4

# FESS fall projects update

## Fermilab Facility Facts:

As of August 31, 1993, there are approximately 155,000 square yards of parking area throughout Fermilab.



- A. Repair and rebuild the front stairs and railings at Aspen East.
- B. Road E relocation will be completed in October. The berm crossing will remain closed to all but emergency traffic.
- C. Soil borings are being taken for the KTeV experimental area.
- D. Preliminary rock borings are being taken to assess possible methods of construction for NUMI experimental line.
- E. Main Injector construction continues with heavy use of Kautz Road south of Indian Road. Geise Road and Frog Farm Road are also being used for construction. Use of these roads by employees is highly discouraged. This is a construction area, and hard hats are required.
- F. Volleyball courts refurbishing project completed.

## Better for you continued

will then have the ability to control the amount of cooling in your area. These thermostats will also be monitored by a computer system that will keep track of area temperatures throughout the building. Wilson Hall is controlled by two air handler systems located on the 16th floor. One handler is located at the south end of the building and controls the southeast and southwest portions of the building. The north handler controls the northeast and northwest. With the new system in place, Wilson Hall will be kept at a constant temperature until the work day is over. During the nights and weekends, the temperature will be allowed to increase. If you need to work during this time, a manual button on the thermostat can be pushed to cool your area.

## Subcommittee ridding Lab of waste

In FY92 it cost the Laboratory nearly \$380,000 to dispose of its chemical, mixed and low-level-radiation waste. In the fourth in a series of articles on waste-minimization efforts, we examine the work being done by Fermilab's Waste Minimization Subcommittee to reduce this cost and to educate employees on ways to reduce the production of hazardous chemical waste.

The Waste Minimization Subcommittee was formed in February 1992. Since that time, the nine-person committee has been emphasizing the fact that waste minimization starts with source reduction.

"We are trying to reduce the amount of hazardous material we use," said **Ken Isakson**, chairperson of the subcommittee.

"We are also trying to get people to substitute non-hazardous materials for hazardous materials."

To accomplish this, the committee has started awareness training for Lab personnel. So far, presentations have been made to waste coordinators and building managers. The subcommittee is also working on a site-specific waste minimization video that will eventually be shown to everyone at Fermilab.

Awareness is the key behind pollution prevention, said Ken. "We are trying to get people to understand it is for their own benefit from a safety and health point of view and also for the protection of the environment."

To do this, the subcommittee estab-



*Aimee Vessell (ES&H) cleans a circuit board using an environmentally friendly cleaner. The committee has eliminated the use of Freon 113, previously used on circuit boards, because of its adverse effects on the ozone.*

## Fermilab Lecture Series

*Caught in the Crossfire: Fundamentalism, Science and the "Culture Wars"*

Martin E. Marty, *The University of Chicago*  
Friday, October 22, 1993 at 8 p.m.

Seventy years ago a new movement, Fundamentalism, developed in America and challenged science in the classroom and the courts. For decades it played a relatively minor role in the religious landscape, but now, at the century's end, Fundamentalisms prosper in America and elsewhere in the world, and challenge the world views of scientists. Understanding fundamentalists has become an urgent topic today.

Six years ago Martin Marty was asked to direct a project being organized by the Academy of Arts and Science to study religious fundamentalist movements in the modern world. The project has received much attention and was the basis for the PBS television series *The Glory and the Power: Fundamentalisms Observed*, based on the book of the same title by Marty. Marty, along with R. Scott Appleby, who directs the project, is the upcoming guest speaker in Fermilab's Lecture Series on Friday, October 22 in Ramsey Auditorium.

Marty is the Fairfax M. Cone Distinguished Service Professor of the History of Modern Christianity at the University of Chicago. The author of 40 books, he won the National Book Award in 1972 for *Righteous Empire*.

Admission is \$3. For information or reservations, call xARTS.

## In Memoriam

Charles "Bill" Testin passed away September 26, 1993 at Central DuPage Hospital in Winfield. Bill joined the Laboratory in 1970 as a member of the AD Linac Group. In 1971 he transferred to Accelerator Operations, and then in 1972, went to the RD Research Services Alignment Group. Bill left the Laboratory on September 11, 1982 due to health problems. He was an avid hunter and fisherman and is survived by his wife Fern, two sons and several grandchildren and nieces and nephews.

## Change your clock, change your battery

Smoke detectors are your first line of defense against fire, but only if they contain a working battery.

About 82% of the homes in America have smoke detectors, but, unfortunately, about one-third of these do not work due to missing or dead batteries. Having one working smoke detector properly installed can cut the risk of injury by one-half.

Remember to change your smoke detector batteries when you are changing clocks back to standard time.—*Steve Lusted*

## Nalwo activities

Nalwo is sponsoring an outing to the Morton Arboretum on Wednesday morning, October 20. The trip leaves from the Users Center at 9 a.m. and returns there at 1 p.m. See the fall colors via a guided tour from an open-air bus! Enjoy walking through the Arboretum's autumn splendor! The cost is \$2 per adult; children are welcome at no additional cost. You may bring a sack lunch.

Nalwo invites everyone to a potluck dinner at the Village Barn on Friday, October 22 from 5:30 p.m. to 8 p.m. Please bring a dish to share for about 12 people. If you cannot contribute a dish, please donate \$3 at the door. There is an additional charge of \$1 per adult to help with the cost of the drinks and set-up. Families are welcome. Babysitting is provided. Enjoy the company, conversation and food of Lab employees, associates, visitors and guests from around the world!

For additional information on these Nalwo events, please call Brenda Kirk at x3440 or Selitha Raja at 708-305-7769.

## Flee the flu bug

Vaccinations will be available again this year on November 10. The Visiting Nurse Association will be offering the flu shots at a cost of \$8. Tetanus boosters will also be available at the same time for \$5. Details regarding time and sign-up will be made available in the next *Ferminews*.

## Chez Leon

Lunches are served Wednesdays for \$13. Dinners are served Thursday evenings for \$23.50. For reservations call x4512.

### Wednesday, October 20

Cream of squash soup  
Chicken breast with horseradish sauce  
Vegetables of the season  
Profiteroles with fresh fruit

### Thursday, October 21

Pasta with bell peppers and sausage  
Seafood kebobs  
Risotto

Spinach salad with hearts of palm  
Chocolate and orange soufflé

### Wednesday, October 27

Black bean soup  
Hot & spicy pork loin  
Vegetables of the season  
Beet and red onion salad  
Pineapple flan

### Thursday, October 28

Mussels in white wine and thyme  
Rabbit in black olive sauce  
Wild rice w/scallions  
Glazed carrots  
Citrus and olive oil cake

## Movie schedule announced

The Fermilab International Film Society presents movies from all over the world. Movies are shown at 8 p.m. Fridays in Ramsey Auditorium. All foreign films have English subtitles. Admission is \$3 for adults, \$.50 for children 12 and under. Coffee and cookies will be served on the second-floor mezzanine following each film.

October 29: *The Leopard Man* (plus a cartoon) A leopard, rented as a publicity stunt, escapes and kills a little girl. Other murders follow, but is it the leopard? Great atmospheric thriller! Jacques Tourneur, dir. U.S., 1943. (63 min.).

November 5: Double Feature: *My Father's Glory/My Mother's Castle* Two films based on the childhood experience of novelist Marcel Pagnol. Set in turn-of-the-century southern France. Yves Robert, dir. France, 1990 (110 min., 98 min.)

## Brown bag seminars coming

The Employee Assistance Program will be presenting two brown-bag seminars in October. *Effective Budgeting and Money Management* will be held on October 22 from noon to 1 p.m. in Curia II. *Consumer Rights and Legal Issues* will be presented on October 29 from noon to 1 p.m. in the 1West Conference Room. Both these seminars were standing-room-only when presented last year. So if you missed credit counselor Diane Bedenbaugh and attorney Lisa Nyuli, make plans to see them now. For information, call Employee Assistance at x3591.

## Wellness Committee program announced

The Wellness Committee has announced the schedule for their Wellness programs through January. Clip and save the following to keep up to date with the latest in how to stay well.

- **Tuesday, October 19** Blood Pressure Screening, 11:30-1 p.m., WH Atrium.
- **Wednesday, October 20** Street Safe, Street Wise by Aurora Police Department and Mutual Ground, noon-1 p.m., Curia II.
- **Wednesday, November 10** Flu Vaccinations and Tetanus Injection by Visiting Nurses Association.
- **Tuesday, November 16** Blood Pressure Screening, 11:30-1 p.m., WH Atrium.
- **Thursday, November 18** Healthy Snacks, Altering Recipes for Low Fat Eating, JoAnne Skabo, noon-1 p.m., 1West.
- **Thursday, December 2** How to Survive the Holidays (Food and Party wise), JoAnne Skabo, noon-1 p.m., 1West.
- **Monday, December 6** Blood Drive, Users Center.
- **Tuesday, December 21** Blood Pressure Screening, 11:30-1 p.m. WH Atrium.
- **Wednesday, January 12** How to Read Labels in the Grocery Store, noon-1 p.m., 1 West.
- **Tuesday, January 18** Blood Pressure Screening, 11:30-1 p.m., WH Atrium.

## Friends of Fermilab "Second Decade" membership drive

If you're reading this issue of *Ferminews*, chances are that you or a member of your family has participated in one of the many science education programs supported by Friends of Fermilab (FFLA).

FFLA was founded in 1983 to make available to the community the vast resources of Fermilab for the purpose of enhancing science education and understanding of science.

In that time, FFLA has identified needs in science education, raised funds and co-sponsored dozens of programs serving thousands of teachers and students.

From the first, FFLA recognized the need for a place other than Wilson Hall lecture rooms to develop and present informal hands-on science programs as well as a home for existing programs. The dream of establishing a science center at Fermilab was

born, and in the fall of 1992 the Leon M. Lederman Science Center was dedicated. FFLA continues to work closely with Fermilab's Education Office, often providing the flexibility crucial to turning a fine program into a truly outstanding one.

Throughout its first decade, FFLA members have played a vital role in creating and sustaining the organization. To ensure a second decade as successful as the first, FFLA is mounting a membership drive until year's end. Please help recognize what has been accomplished and what can be done in the next 10 years. Remember, the easiest way to make a tax-deductible contribution to FFLA for the coming year is by signing a simple one-time payroll deduction authorization card.

For more information please call Friends of Fermilab at x3092.

## Lab employees help SciTech

SciTech, the Aurora-based science and technology interactive center, was recently awarded a \$107,664 grant from the Institute of Museum Services, a federal agency. At least half of the dollar amount of SciTech's grant was awarded in recognition of the community's contributions to SciTech in the form of volunteer work by individuals, the City of Aurora and several companies, including Fermilab.

Many Fermilab employees have volunteered their time to SciTech over the years. **Ernest Malamud** (Directorate), director of SciTech, said "We couldn't have possibly built such a successful center without the hard work and creative ideas of the many Fermilab employees. We welcome more."

The employees who are volunteering, or who have volunteered their time at the center in the past, include **Dave Anderson** (RD), **Dave Berg** (CD), **Eileen Berman** (CD), **Miriam Bleadon** (RD), **Bruce Chrisman** (Directorate), **Frank Cole** (Retired), **Mary Anne Cummings** (user), **Robin Denham** (Physics), **Graciela Finstrom** (TS), **Herman Haggerty** (RD), **Ken Hartman** (RD), **Bill**

**Higgins** (RD), **Todd Johnson** (AD), **Ralph Pasquinelli** (AD), Director **John Peoples**, and **Regina Rameika** (RD)

SciTech is located at 18 W. Benton in Aurora. It is open to the public Wednesday through Sunday. There is an admission fee and group rates can be arranged.

## Harper's Index

Portion of the U.S. pumpkin crop that is canned: 1/3.

Number of U.S. doctors whose surname is Nurse: 3.

## New Stockroom items

1307-0268 Manual, computer operations, DEC Fortran V6.0 V/V UPD DOC DEC P/N QA-100AA-WZ.

1246-7410 Wrench set, socket, metric, 20-pieces, 3/8 in. square drive.

## Nalrec news



Back by popular culinary demand, Paul Gentry (TS), Ray Fonseca (FESS) and Leroy Middlebrooks (AD) (shown left to right at the last chicken b-b-q) will be serving up their (almost) famous barbecued chicken tonight at Nalrec's Fall Fling. Homer will be spinning records and for \$2 you'll get a 1/2 of that famous chicken, potato salad, cole slaw, roll and butter. Don't miss it at the Kuhn Barn from 5:15 to 9:45 p.m.

## Cafeteria continued

fats in the fryers and in the preparation of foods. They have also purchased low-sodium bases when possible and have made reduced-calorie salad dressing regularly available at the salad bar. Recently, however, there have been requests for more low-fat, low-calorie selections, said John.

"In order to widely offer these food items, we need to know that we have a consistent and adequate demand," said John. "In light of budget constraints, we have to know we have enough customer support to warrant the change."

To assess the demand, John would like those people who are interested in more "healthy" choices to let him know by sending suggestions to MS 322. "We would like to know what kinds of food you would like to eat. We would even like to get your favorite 'eat healthy' recipes."

Another recent change in the cafeteria is that they have virtually eliminated the use of Styrofoam and now use more environmentally friendly paper products for carry-out

## Fall activities and sports schedule

Doubles Tennis League: Sunday evenings from 4-10 p.m. intermediate and advanced players. Play to begin on October 10. Contact Mercedes, FNAL::REYES, x3111 or Jean, FNAL::JEANM, x2548.

Round Robin Singles Tournament: Beginning October 19 intermediate and advanced players. Games are held Tue. 1-4 p.m., Wed. 9-10:30 a.m., Thurs. 9-10:30 a.m., Fri. 10 a.m.-1 p.m., Sat. 12-3 p.m. Contact Mercedes, FNAL::REYES, x3111 or Jean, FNAL::JEANM, x2548.

Winter Refereed Coed Volleyball League: Games are held Monday evenings beginning October 18. Interested persons should contact Mark, DEVL::NYLUND or Jean, FNAL::JEANM, x2548.

Winter Basketball League: Play begins October 21. Games are Thursday evenings beginning at 5:30 p.m. Rosters are frozen by the league's second game. Contact Harry, FNAL::FERGUSON or Jean, FNAL::JEANM, x2548.

Winter Soccer League: Women are welcome to participate. Games will be held on Wednesday & Friday evenings beginning

October 13. Contact Sandor, FNAL::FEHERS or Jean, FNAL::JEANM, x2548.

Aerobics Class: Classes are held on Monday & Wednesday from 5:30-6:30 p.m. in the exercise room. This is an eight-week session beginning October 25 until December 15. Fee is \$2 per class. Monday's class will feature a warm-up, a 45-minute high-impact routine with a low-impact demonstration, and cool-down. Wednesday class will be a combination low-impact/step class with exercises for the arms, legs and hips. Men are welcome to attend. You must register prior to taking this class by contacting Jean, FNAL::JEANM, x2548.

Muscle Toning Class: This eight-week session is held on Tuesday & Thursday from 5:30-6:30 p.m. beginning October 26. Cost for the session is \$40. The focus of this course is on toning and shaping muscles. Men are welcome. Contact Jean, FNAL::JEANM, x2548.

Participation in the above activities requires a facility membership. 1994 Memberships are now on sale, WH15W.



Angie Velasquez and Sean Cannon stock the new condiment centers in the Cafeteria.

Illinois Gas.

Although there are many changes taking place in the Fermilab Cafeteria, one thing remains the same. It still serves as the heart of the central laboratory building. As the November 1973 *Village Crier* predicted, the cafeteria provides a "sense of community, where ideas, plans and personal exchanges combine into the morale that is sometimes the basis of new discovery."

## New markers aid students

As you travel near the Lederman Science Center, you may notice a number of white, fiberglass blades, about five-feet tall and four-inches wide with reflective numbers at the top, stuck into the ground along the wood chip paths and trails. No, they are not survey or construction markers. These numbered blades serve as signals to the Education Office docents that there is something worth pointing out to the groups of students who visit the site as part of the *Particles and Prairies* program.

*Particles and Prairies*, now in its third year, is an educational program developed at Fermilab that focuses on the prairie. It begins with regularly scheduled workshops for sixth, seventh and eighth grade classroom teachers. At these workshops, teachers learn about the prairie and other habitats and become familiar with classroom and on-site activities for their students. One of the on-site activities is a nature walk that helps students develop observational techniques while learning about the flora and fauna at Fermilab.

To help the docents provide a meaningful nature walk, **Dave Abler**, the program's administrator, enlisted the help of one of his newest docents, **Bob Kelly**. Bob has extensive experience in interpretive outdoor education, having worked for the DuPage County Forest Preserve. Bob scouted the various trails and prepared a written guide that discusses salient points of interest at the location of each marker. To help Bob in his project, Dave called upon two friends of the Education Office, Grounds Keeper **Bob Lootens** and Fermilab retiree **Finley Markley**. Finley and Bob used their extensive knowledge about local plants and their collective experience with the Fermilab Prairie Committee (Finley is a past chairperson and Bob is the current chairperson) to familiarize Bob Kelly with the grounds surrounding the Center. Bob Lootens also suggested the design of the markers and helped "plant" each one.

Thanks to the team effort of Bob Kelly, Bob Lootens and Finley Markley, the Education Office has an easier time providing a meaningful field trip to hundreds of *Particles and Prairies* students who visit each year.—*David Abler*

## Classified ads

### Vehicles

**1989 Toyota Tercel**, red, stick-shift, 3 door hatchback. 60K miles, works fine, no problems whatsoever. New muffler & relatively new tires, \$2,400. Call Bob at 312-585-5597 anytime.

**1988 Ford Festiva**, grey, stick-shift, 3 door hatchback, 55K miles, excellent condition, \$2,000. Call Donna at x3266.

**1984 Honda Accord DX**, white, PS, PB, AC, Pioneer AM/FM cassette radio, recently tuned. Excellent condition, \$8,200 o.b.o. Call Marge at x3800.

**1972 Triumph Bonneville 650**, 4 speed, excellent runner, great condition, 11K orig. miles, approx. 85% stock, \$1,800 o.b.o. Call Neal at x2749 or 708-969-6903.

### Miscellaneous

**AT&T cordless phone** w/speakerphone feature, like new, \$100 o.b.o.; **Radio Shack cordless phone**, still in box, never opened, \$100; **back pillow**, provides sacral & lumbar support, \$10. Call Dan at x3916 (MWF) or 815-753-6484 (T-Th).

**BF Goodrich Radial TA 205-65R15**, al-

### Waste continued

lished Process Waste Assessments (PWAs). These involve employees carefully examining the materials they use on the job to see what, if any, kinds of hazardous waste they generate. "Based on those assessments, we can decide whether or not the materials used can be reduced, substituted or eliminated."

Both FESS and Business Services Sections have done successful formal PWAs, said Ken. Many other people throughout the Laboratory have also done them in an informal manner.

The subcommittee also found, through the PWAs, that a lot of the hazardous material that was being thrown out were products that people no longer needed but were still useful. To cut down on this kind of waste,

most new, \$10; **baby stroller**, \$15; **F.P. car seat**, \$25; **exercise bike**, \$10; **coffee table**, \$10. Call Mike at x2220.

**54" round oak dining room table**, \$375. Call x4136 or 708-365-5275 evenings.

**25" color TV**, Zenith console model, \$50. Call Jim at x4293 or 708-416-0548.

King size **waterbed** w/ headboard, full motion & his/hers motionless mattress & heaters, \$200. Call Gayle at x8258.

**Macintosh Powerbook 180**, 4 MEG/120MEG, brand new, still in box, \$3,000; **Canon Rebel II EOS** camera body, \$200. All new, still in boxes, never used. Call Jane at 708-462-3985 evenings.

Sears **Kenmore laundry center**, stacked washer/dryer, excellent condition, \$400 o.b.o. Call x2312 or 708-820-6876 after 5 p.m.

**Queen bed, twin bed, full mattress, boy's bike, ladies' bike, baby's car seat, TV table**. Call Jan at x2263 or 708-231-2066.

### Real estate

For sale by owner: 3 bedroom, 2 bath **country ranch** on 1 acre w/full basement, 2.5 car garage & fireplace on Deerpath Rd. west of lab. Call 708-907-1638.

several groups have developed a Chemical Management System, a computer database of the excess hazardous materials in their areas. Ken said this is a significant means to reduce waste. For example, Ken said, "If I bought 10 jars of cleaning solvent and I use one, but don't need the rest, I can list them in the database and someone who needs this solvent can get it from me. This is cost effective and reduces waste."

Reducing waste of any kind involves following some common-sense rules. One example is buying only what you need. "Some people think 'if I buy 55 gallons of paint, I can get it for one dollar a gallon cheaper,'" said Ken. "But what they don't realize is if they don't use all of it, it is going to cost a dollar a gallon to dispose of it."