

# FermiNews

*The Newsletter of the Fermi National Accelerator Laboratory*

## URA, DOE ADOPT NECESSARY & SUFFICIENT STANDARDS

"July is the month to celebrate revolutions," quipped CHERRI LANGENFELD, manager of the Department of Energy's Chicago Operations Office. With that, she prepared to sign a document that many hope will usher in a revolutionary new era in DOE's management of national laboratories.

At the July 14 ceremony, DOE's JOHN O'FALLON, director of the High Energy Physics Division; DOE Batavia Area

Office Manager ANDREW MRAVCA; and Universities Research Association President FRED BERNTHAL signed a set of "necessary and sufficient" standards to regulate management of environment, safety and health at Fermilab. Next, Langenfeld and Bernthal put their pens to a modification of the management contract between URA and DOE, to incorporate the new ES&H standards into day-to-day management of Fermilab.

"We anticipate that the procedures and programs that protect workers will remain largely unchanged. Most changes are likely to come in reduced paperwork and administrative costs, for a more effective, less costly ES&H program."—*Larry Coulson*

project and similar projects at other laboratories succeed, the Department plans to extend the use of the process in laboratory management.

O'Fallon expressed his pleasure at Fermilab's selection to lead the way in the new effort. "It reflects DOE's confidence in Fermilab's management," he told the group of 35 assembled in the Wilson Hall Art Gallery for the signing ceremony.

The set of standards, developed in a DOE-Fermilab pilot project begun in early May, will replace the current system of DOE orders regulating ES&H. The pilot project spearheads a DOE-wide effort to move away from prescriptive practices toward standards-based management of the national laboratories. If Fermilab's pilot

Fermilab's pilot project began by identifying the ES&H issues that matter to workers. A team of experts then determined the set of standards both necessary and sufficient to address all issues. Following last month's signing of the standards, Fermilab has now begun the process of implementing them.

"Most of the standards are common industrial standards that light industrial companies must follow," said Associate Director LARRY COULSON, who led the project. "We anticipate that the procedures and programs that



## FermiNews

Friday, August 18, 1995 • Volume 18, Number 14

- Summer Shutdown in High Gear ..... page three  
People & Events ..... pages four through five  
Lab Joins Clean Air Partners ..... page six

*continued to page six*



Participating in the signing ceremony were (standing, l to r) John Peoples, Ray Stefanski and Larry Coulson. (Sitting, l to r) John O'Fallon, Andy Mravca, Fred Bernthal and Cherri Langenfeld.

# YOUR HEALTH & FITNESS

## A HEALTHFUL LIFESTYLE FOR HEALTHY SKIN

There are two good reasons to be concerned about lifestyle factors that affect skin health: cancer prevention and prevention of premature aging of the skin. A healthful lifestyle can help keep skin healthy, reduce the severity of many dermatological disorders and slow skin aging.

### SUN PROTECTION

Protecting skin from the sun's damaging rays will help prevent both premature aging and cancers of the skin. Sunlight is responsible for wrinkles, age spots and many of the changes in skin texture that occur as we age. These changes occur at a much slower rate in people who are rarely exposed to sunlight.

But we love to be outdoors. The benefits of outdoor exercise and recreation far outweigh the health risks of skin damage, if you take reasonable precautions to protect your skin. When possible, schedule outdoor time for the early morning or late afternoon, avoiding the intensity of midday rays. Look for shady walking, jogging and cycling routes.

The most effective skin protection is some form of sun block. Tightly woven clothing (hold it up to a light and see how much shines through) helps keep the sun's rays from reaching your skin, and wide-brimmed hats provide some protection. Zinc oxide blocks the sun and is good for areas that you can't cover with clothes, like noses and lips.

When a sun block is not practical, a sun screen should be used. These do not shield the skin completely, but they do reduce the damaging effects of ultraviolet rays. Evidence suggests that the skin can repair some damage when sunscreens are consistently applied. But

other researchers warn that sunscreens can provide a false sense of security. Since they prevent burning, they may lull us into thinking the sun is not hurting us, while damage may still be occurring.

A sunscreen with SPF-15 is generally recommended, although people with fair skin may need something stronger. Sunscreens should be applied 30 minutes before exposure and used conscientiously whenever outdoors, even on cloudy days since some radiation penetrates cloud cover. It is especially important to use sunscreen on your face, ears and shoulders, which are the most commonly burned areas.

### EXERCISE

Exercise is good for your skin. When you exercise, blood flow to the skin increases as your body works to get rid of extra heat generated by the contracting muscles. This increased blood flow provides the skin with nutrients and gets rid of wastes. One study found that regular exercisers had thicker skin than sedentary people. Thicker skin ages more gracefully because it develops wrinkles later than thinner skin.

### SMOKING

People who smoke cigarettes show premature aging of the skin, especially facial wrinkles. If you can't quit smoking for your health, do it for your vanity. Longtime smokers tend to look about 10 years older than nonsmokers the same age. This effect may be caused by some of the chemicals in cigarette smoke and a decrease in skin blood flow caused by nicotine.

### NUTRITION

The best nutritional recommendation for healthy skin is not magic, just plain good sense. It's the same phrase you've



heard a hundred times before: Eat a well-balanced diet. While true vitamin and mineral deficiencies are associated with skin disorders, getting more than the recommended daily allowance of vitamins and minerals does not make above-average skin.

Supplements will only improve the skin if they are correcting an existing deficiency. In fact, too much of some vitamins can actually cause skin problems. Too much vitamin A, for example, is toxic and can make the skin rough and dry. Niacin can cause acne and allergic reactions in some people.

### STRESS

Stress can cause many skin problems and worsen preexisting disorders. Stress-management techniques, including hypnosis, biofeedback and other relaxation exercises, have been shown to improve many skin problems. These techniques may work by changing hormone levels and nervous system activity.—Barbara A. Brehm, associate professor of Exercise and Sport Studies at Smith College, Northampton, Massachusetts.

# SUMMER SHUTDOWN IN HIGH GEAR

A summer shutdown sounds like a vacation. Not at Fermilab! The Laboratory is hard at work, using the three-month suspension of accelerator operations that began July 24 as an opportunity to repair and upgrade accelerators and collider detectors, and to prepare for operations using the new Main Injector in 1999.

In one major "shutdown" project, the Accelerator Division is constructing a tunnel underpass beneath the injection line that takes antiprotons from the Antiproton Source to the Tevatron during collider operations. The underpass will hold a new 8 GeV beamline that will inject protons from the Booster into the Main Injector when it begins operating. Other projects involve checking, maintaining, repairing and

upgrading aging components of the accelerator system; and testing new components for the accelerator runs of the future.

During the breather from 'round-the-clock data-taking, both collider detector collaborations are repairing and maintaining their detectors. DZero is using the shutdown to build an annex to hold a compressor for cooling their detector's new superconducting solenoid for use in Run II, the first collider run with the Main Injector. CDF is completing and installing upgrades to their detector to make the most of the physics from the upcoming fall and winter collider run, scheduled to begin in late October.



The intense activity of the accelerator shutdown will come to an end when a beam of protons returns to the Main Ring at the end of September—just in time to begin the intense activity of the accelerator start-up.

## LAB TO SERVE AS COOLING CENTER

Fermilab has agreed with the Kane County Emergency Management Service to serve this summer as a back-up cooling center for local residents in the event of a heat emergency.

In a heat emergency, Fermilab would shelter up to 30 Kane County residents in Wilson Hall. The ES&H Training Room and adjacent areas on the ground floor would serve as the main shelter area. Other areas were considered for this purpose, such as the Education Center and Users Center, and could be utilized if necessary. The DuPage County Emergency Management's Agency has also been offered the same arrangements if necessary.



## Children's Center Holds Carnival

*A summer carnival was held at the Children's Center on July 20, 1995. The children who attend the Center and their families spent the evening playing games and enjoying a cookout.*

*The Children's Center accepts children ages six weeks to six years old. Currently, there are openings in the three-to five-year-old rooms. For more information, call x3762.*

# People & Events

## A REMINDER TO GET MOVING

Just a reminder that August 28 is the last day to start the one month "Just Move Cross Country Journey" exercise program. The program is designed to encourage you to have fun while starting an exercise program. All you have to do is track the time you spend doing moderate physical activity for

four weeks. Before you know it, you will have formed a healthy habit! Stop by the Recreation Office and pick up an information packet. You must register for this program by August 28. Participants will receive a frisbee, a sports water bottle and a chance at a grand prize drawing.

## ARTS SERIES PRESENTS

### MILT JACKSON

AUGUST 26, 1995

Tickets are still available for Milt Jackson, August 26, 1995, in Ramsey Auditorium. Vibraphonist Milt Jackson has been at the heart of jazz since he was first discovered by Dizzy Gillespie as a teenager in 1945 in a Detroit nightclub. Although influenced by vibist Lionel Hampton, Milt Jackson was the first proponent of be-bop to play the instrument. He was a member of the Dizzy Gillespie-Charlie Parker Sextet in the late '40s, and along with Parker and Gillespie, became one of the leaders of the be-bop and modern jazz movements.



### 25-Year Service Awards

Directorate Representative Bruce Chrisman presented 25-year service awards to 43 Fermilab employees at a luncheon May 15, 1995 at Chez Leon. Pictured are (Row 1, l to r) Tom Rathbun, Bob Horbus, Bill Martin, Louis Kula, Sherry Hickey, LaDaune Trierweiler, Barb Perington, Bob Mau, Bob Vanecek, Ed Barsotti, Andy Van Ginneken and Doug Booth. (Row 2, l to r) James Schmidt, Larry Vonasch, Richard Bingham, Curtis Danner, Ray Yarema, William Byrd, Ronald Norton, Chuck Zonick, George Smith, Michael James and Bob Marquardt. (Row 3, l to r) Bruce Chrisman, Nick Cadena, Samuel Gallegos, John Korianek, Jon Blomquist, Bill Wickenberg, Glenn Johnson, Charles Matthews, David Smith, Stanley Orr, Robert Shovan and Jim Walton. Not pictured are: Armand Bianchi, Lee Brown, Danny Douglas, William Fowler, Jesse Guerra, Ronald Olsen, Carl Pallaver, Laurence Sauer and Jack Smith.

# REC FACILITY MEMBERSHIPS ON SALE

1996 Recreation Facility memberships go on sale September 1 in the Recreation Office, WH15SW. Sale hours in September are 8:30 a.m.-5 p.m., Monday through Friday. After September, sales will be on Monday, Wednesday and Friday only from 8:30 a.m. -5 p.m. Regular Membership is \$50; Student Membership is \$25. Memberships renewed in September will receive \$10 off a regular membership and \$5 off a student membership. Renewed memberships only may be purchased by mail by sending the application, and a check payable to Fermilab to M.S. 126. New memberships purchased September 1 get one month free. New memberships must be purchased in the Recreation Office.

## FRELO FLY-IN

Spectators are welcome to watch the model biplanes fly at the 6th Annual Tony Frelo Biplane Fun Fly on Sunday, August 27. Flying begins at 9 a.m. and lasts until 3 p.m. The event will be held at the Fermilab Barnstormer's Frelo Field next to the Pioneer Cemetery.

## Harper's Index

Number of Susan B. Anthony dollars held by the federal government: 291,000,000

Cost of storing them, per year: \$30,000

## HEALTH & FITNESS DAY DRAWS HUNDREDS

The 1995 Fermilab Health & Fitness Day, sponsored by the Wellness Works Committee, was a big success. Wednesday, May 17 provided a slightly cool, overcast day for the event. The 151 participants gave it their all, with almost everyone

completing a lap around the Main Ring by either walking, running, rollerblading or biking (three laps). Each participant received a water bottle, medallion and a coupon for fruit or yogurt. There was also a trophy awarded for the largest percentage of participation by a division. The winner of this trophy was the Business Services Section with 17% participation. There was also a drawing for prizes from the sign-up sheets, and the winners include:

Grand prize: Sports bag and goodies, MAY WEST (LSS).



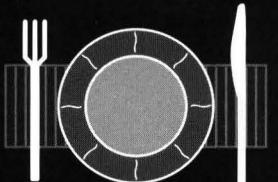
Rob Atkinson, Sara Tompson, May West and Angie Greviske help set the pace during the Health & Fitness Day.

Head bands: CHUCK MAROFSKE (LSS), JIM SCHELLPFEFFER (Physics), NEIL SARKAR, VICTORIA DAVIS (RD), BOB BARNES (FESS), PAT OLECK (Directorate), ROBIN DENHAM (Physics), CHARISSE MALO (BSS), CARL LUNDBERG (RD), JOHN RAUCH (RD), CAROL HALDERSON, DAVID NEVIN (FESS), SARA TOMPSON (LSS), KATHY GRAMLY (LSS) AND SALLY ARNOLD.

A special thanks to KAREN MURPHY (LSS) for assisting in the setup. We look forward to seeing everyone again next year.—Jean Guyer

## Chez Léon Menu

Lunch (Wed) \$8.00 • Dinner (Thurs) \$20.00  
Reservations: x4512



Wednesday, August 30 • Vegetarian lasagna, garden salad, profiteroles

Thursday, August 31 • Tomato, caper, olive & blue cheese salad; grilled swordfish w/mint cucumber salsa; vegetable of the season; peach shortbread w/ raspberry sauce

# LAB JOINS CLEAN AIR PARTNERS

Many federal, state, local government, business, health and environmental organizations in the northeastern region of Illinois have formed a coalition called Partners for Clean Air to promote the cleanup of our air. Fermilab is a member of this partnership.

The Partners' initial efforts are focused on voluntary reduction of emissions on summer Ozone Action Days. These are days when ozone levels are predicted to be at unhealthy levels. High-level ozone presents a health threat to everyone, particularly children, the elderly and anyone with a respiratory or heart condition. It is expected that there will be an average of 10-15 action days per year.

When notified that an Ozone Action Day has been declared, Fermilab will put out notices on Channel 13 and computer networks. Our Laboratory's commitment to this effort is to promote voluntary car pooling. In addition, Fermilab's site operations that may add to the ozone will be rescheduled to the extent possible. This primarily affects the facilities and maintenance operations in FESS. Reduction in mowing, structural painting and deferrable auto and truck usage are also expected. ■

# FermiNews

*The Newsletter of the  
Fermi National Accelerator Laboratory*

FermiNews is published by the Fermilab Publications Office

MS 107, P.O. Box 500 Batavia, IL 60510 • 708-840-3278 • TECHPUBS@FNAL

Fermilab is operated by Universities Research Association, Inc.

under contract with the U.S. Department of Energy

# CLASSIFIEDS

## ■ VEHICLES

1978 Honda 550k Four motorcycle, 10,500 miles. Incl. color-matched Vetter Windjammer fairing, crash bars & carrier, all stock, excell. cond., new tires & chrome exhaust. Call Ken at x2507.

## ■ MISCELLANEOUS

Tool carrier for small-size pickup truck, \$40 o.b.o. Call David at x3880.

3 small dormitory-style refrigerators,

like new, \$35 ea. Call Ed at x2887 or page 1117.

Riding lawn mower, HWI, 8 HP, 5 sp. trans., 30 in. cut, electric start, rear discharge, new battery, \$250. Call Ron at x4663 or 708-466-1823 eves.

## ■ WANTED

Wanted: chest freezer, no longer than 54". Call x3011 or 708-557-2523.

## ES&H STANDARDS

*continued from page one*

protect workers will remain largely unchanged. Most changes are likely to come in reduced paperwork and administrative costs, for a more effective, less costly ES&H program."

Fermilab Director JOHN PEOPLES called the adoption of the necessary and

sufficient ES&H standards "a real change." He credited Langenfeld with finding "new and imaginative ways to make Fermilab, CH and DOE work more efficiently. DOE has given us the opportunity," he said. "Now it's up to us at Fermilab to meet the challenge and find ways to operate more efficiently." ■

# THANK YOU

My family and I would like to thank all of you for your gifts of kindness in memory of my mother Alice Jack-

son. It means more than words can say.—*Frank Jackson*



The deadline for the  
Fri., September 1, 1995  
issue is Wed., Aug. 23.  
Please send your article  
submissions or ideas to  
the Publications Office.



TOTAL RECYCLED FIBER  
10% POST CONSUMER FIBER